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Healthy Kansans living in safe and sustainable environments.

# Victorious VPD

## Nothing to “Whoop” About!

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Bureau of Epidemiology and Public Health  
Informatics



# Topics/Objectives

- **Notable VPD outbreaks**
- **Influenza Surveillance**
- **LTCF Toolkit**
- **Evaluation of College Immunization Practices**
- **Adolescent, kindergarten, 24 months immunization coverage assessments**
- **Perinatal Hepatitis B Prevention Program**

# Statewide Pertussis Outbreak 2012

Jena Callen-Scholz

Medical Investigator

Kansas Department of Health and Environment

Bureau of Epidemiology and Public Health Informatics



# Pertussis

- **Highly communicable bacterial disease found in the mouths, noses and throats of infected people**
- **Transmission**
  - Direct contact with discharges from respiratory mucous membranes of infected persons
- **Signs/Symptoms**
  - Cough lasting  $\geq 14$  days
  - Paroxysmal spasms of severe coughing
  - Whoop
  - Post-tussive vomiting

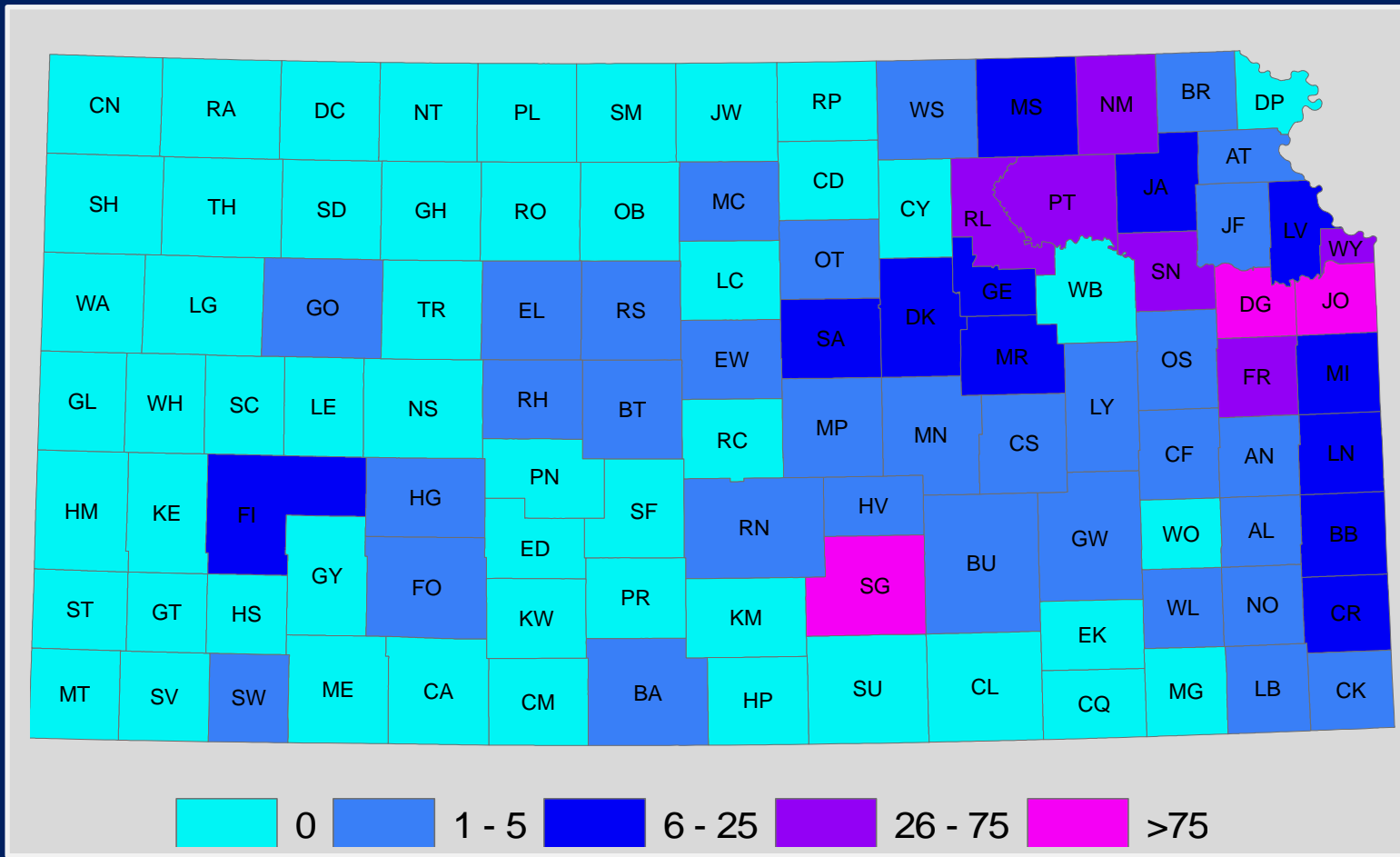
# Pertussis Surveillance and Reporting

- **Nationally notifiable**
- **Clinical case definition**
  - Cough  $\geq 2$  weeks AND
  - At least one of the following:
    - paroxysms, whoop, post-tussive vomiting
- **Probable case**
  - Meets clinical case definition
  - Not laboratory confirmed
  - Not epidemiologically linked to a lab confirmed case
- **Confirmed case**
  - Culture positive OR
  - Clinical case and PCR positive OR
  - Clinical case and epi-linked to confirmed case

# Pertussis Cases in Kansas - 2012

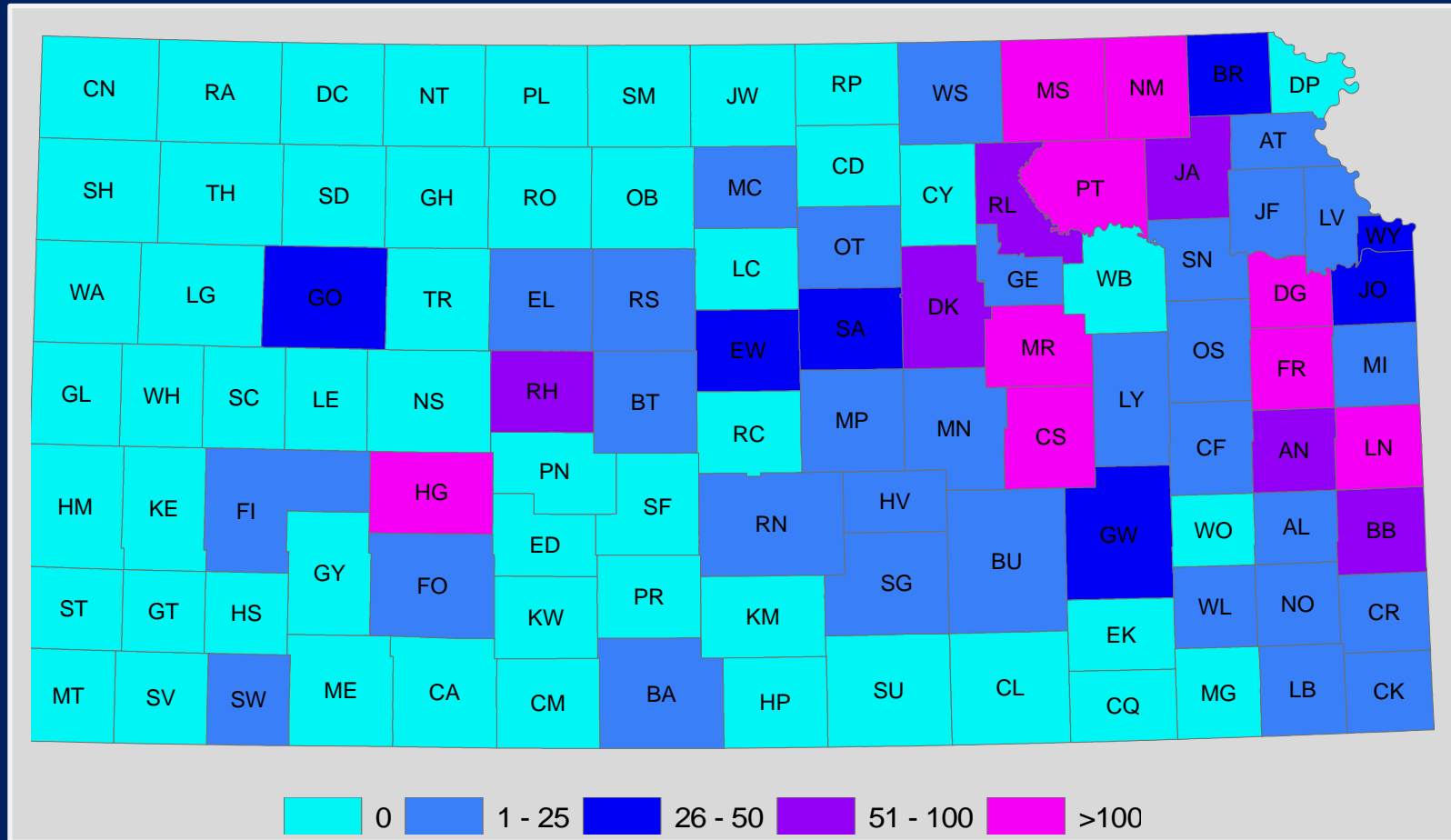
- **887 cases reported in 53 counties**
  - **449 (50.6%) Confirmed**
  - **438 (49.4%) Probable**
- **37 (4%) were hospitalized**
  - **Median Age: 1 year (Range 5 days – 81 years)**
  - **16 (43%) were less than 6 months**
  - **5 (14%) were less than 2 months**
- **1 death in an adult**

# Number of Cases of Pertussis by County, 2012

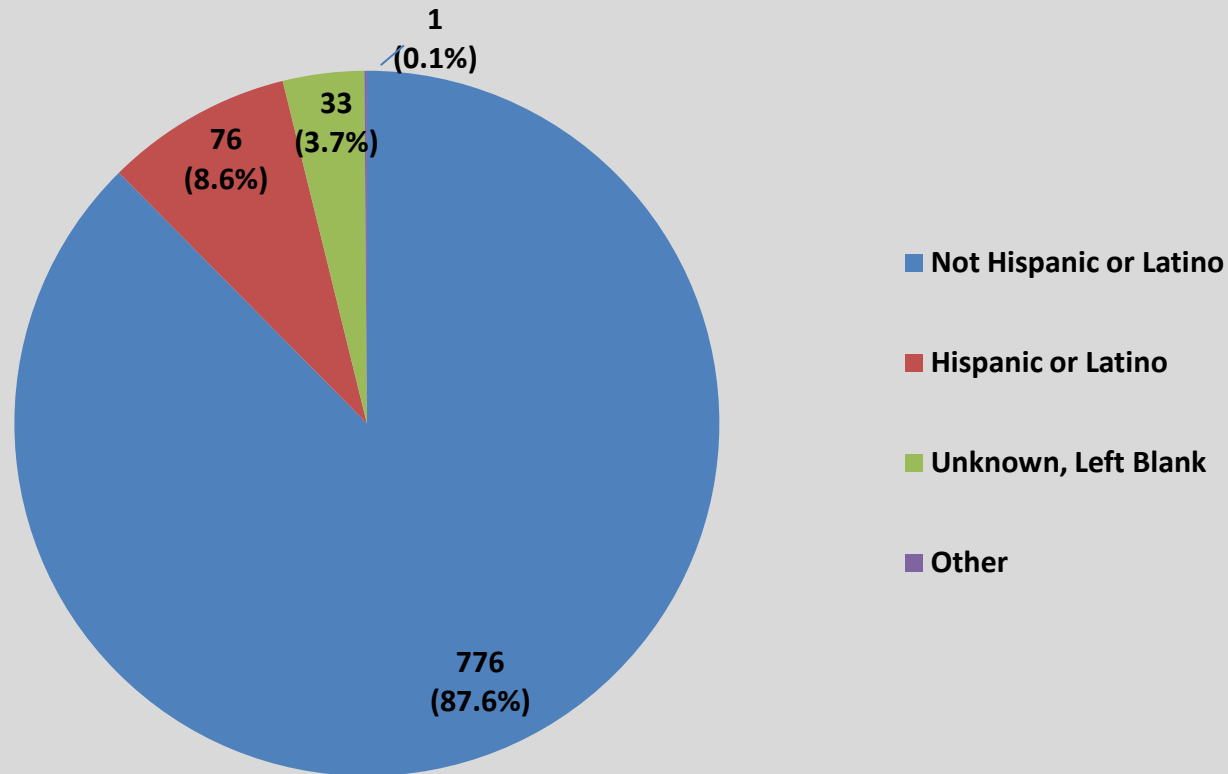




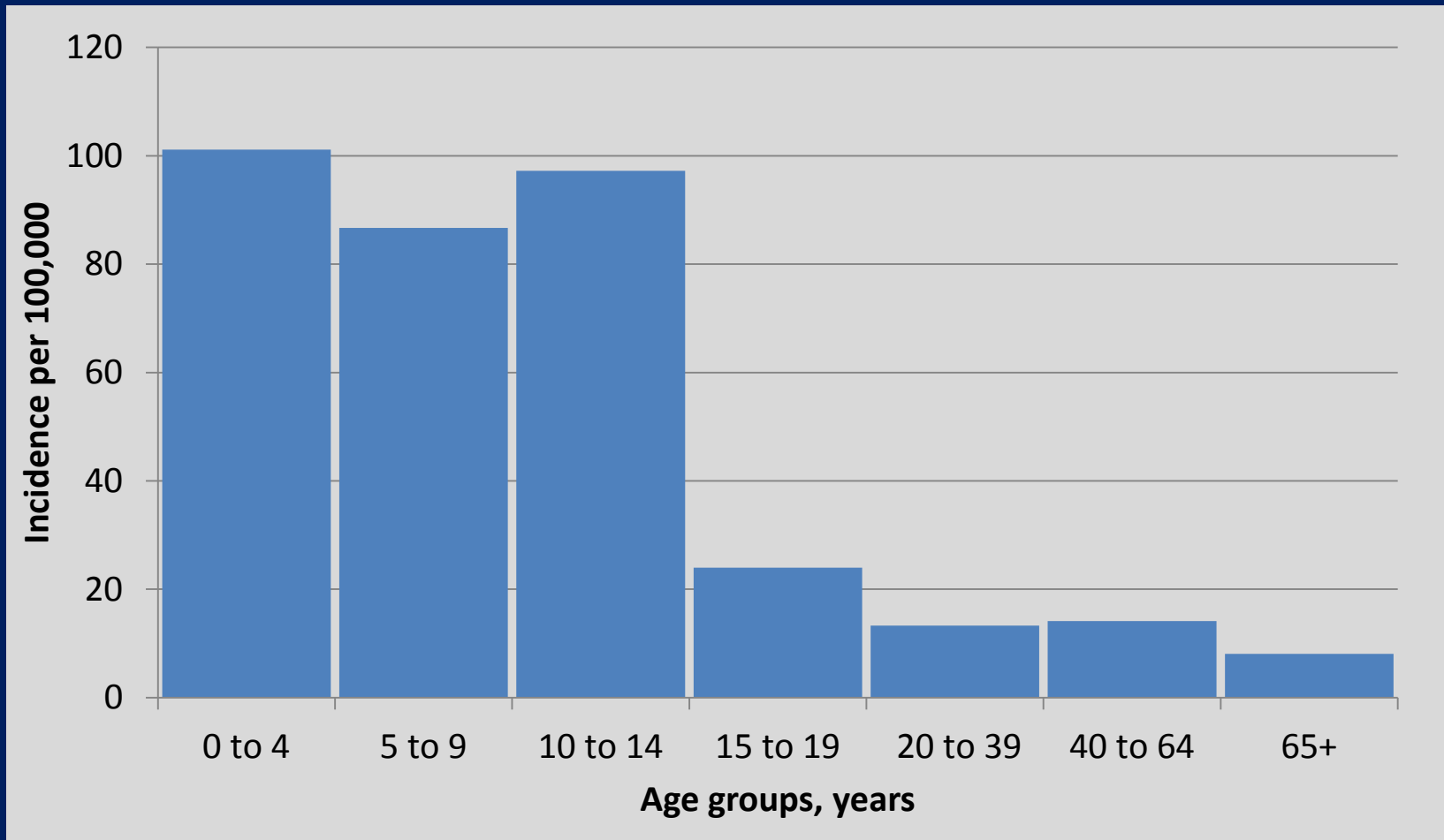
# Incidence of Pertussis per 100,000 Population by County, 2012



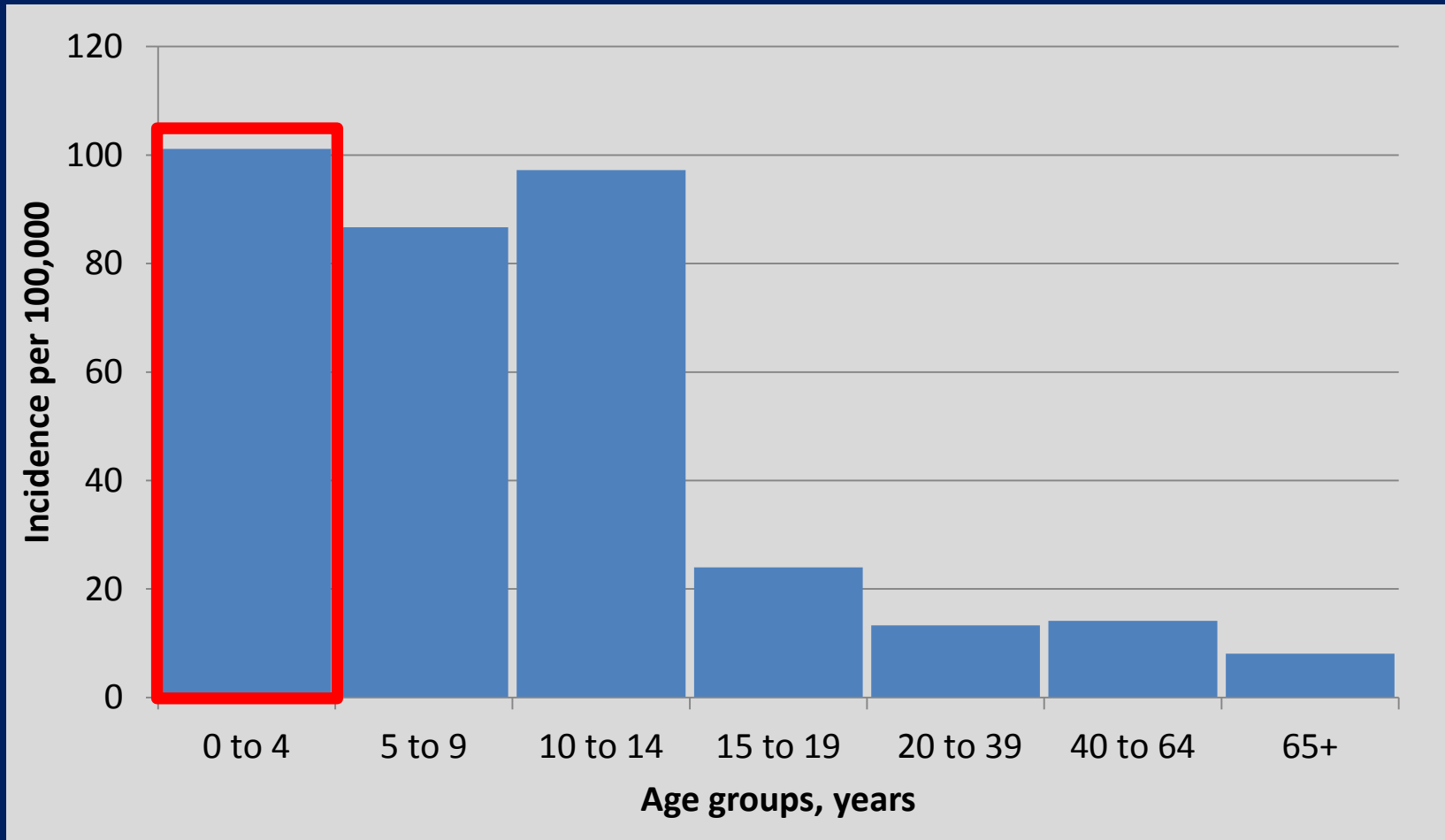
# Confirmed and Probable Pertussis Cases by Race, 2012



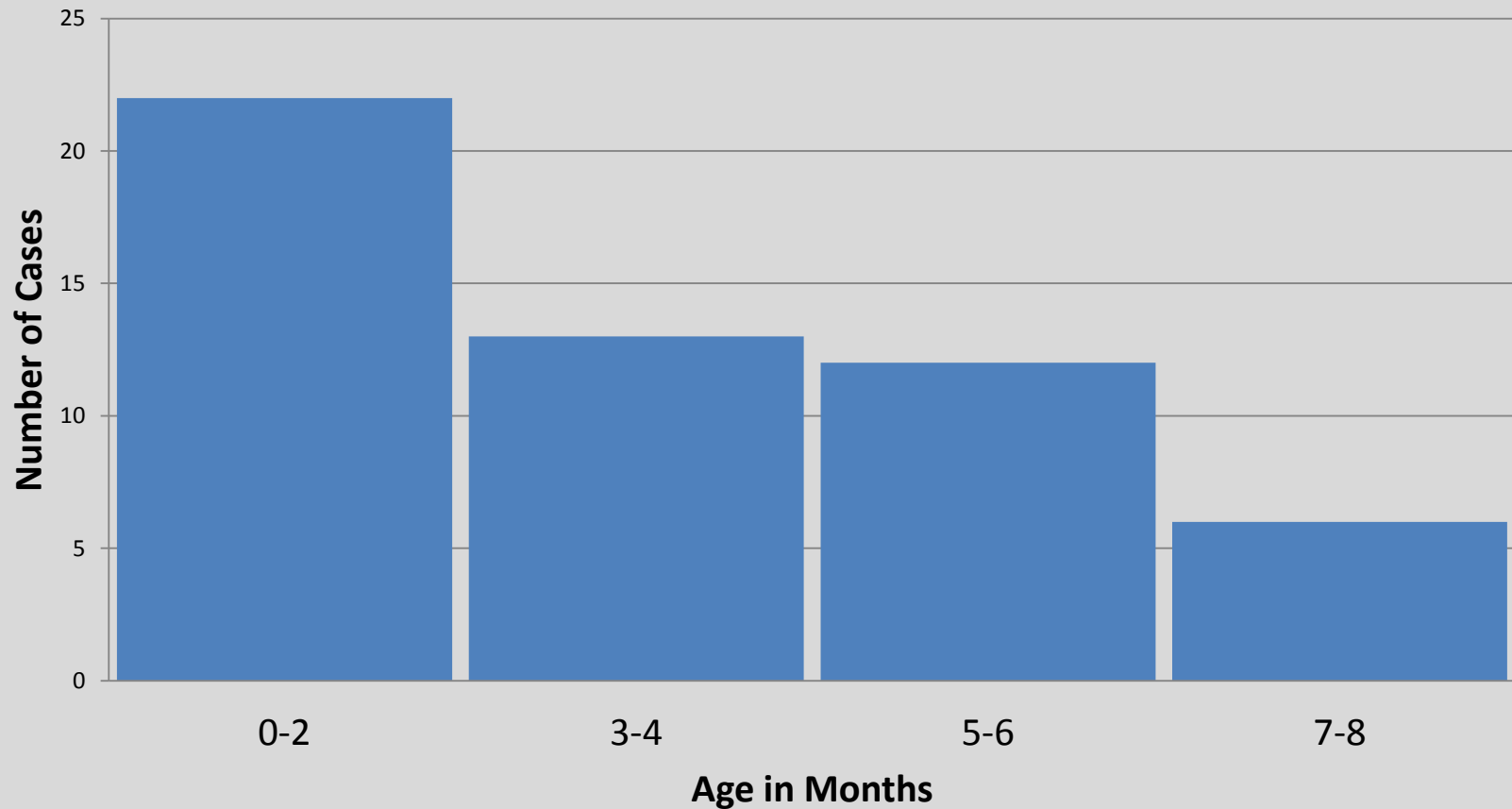
# Incidence of Pertussis by Age group, 2012



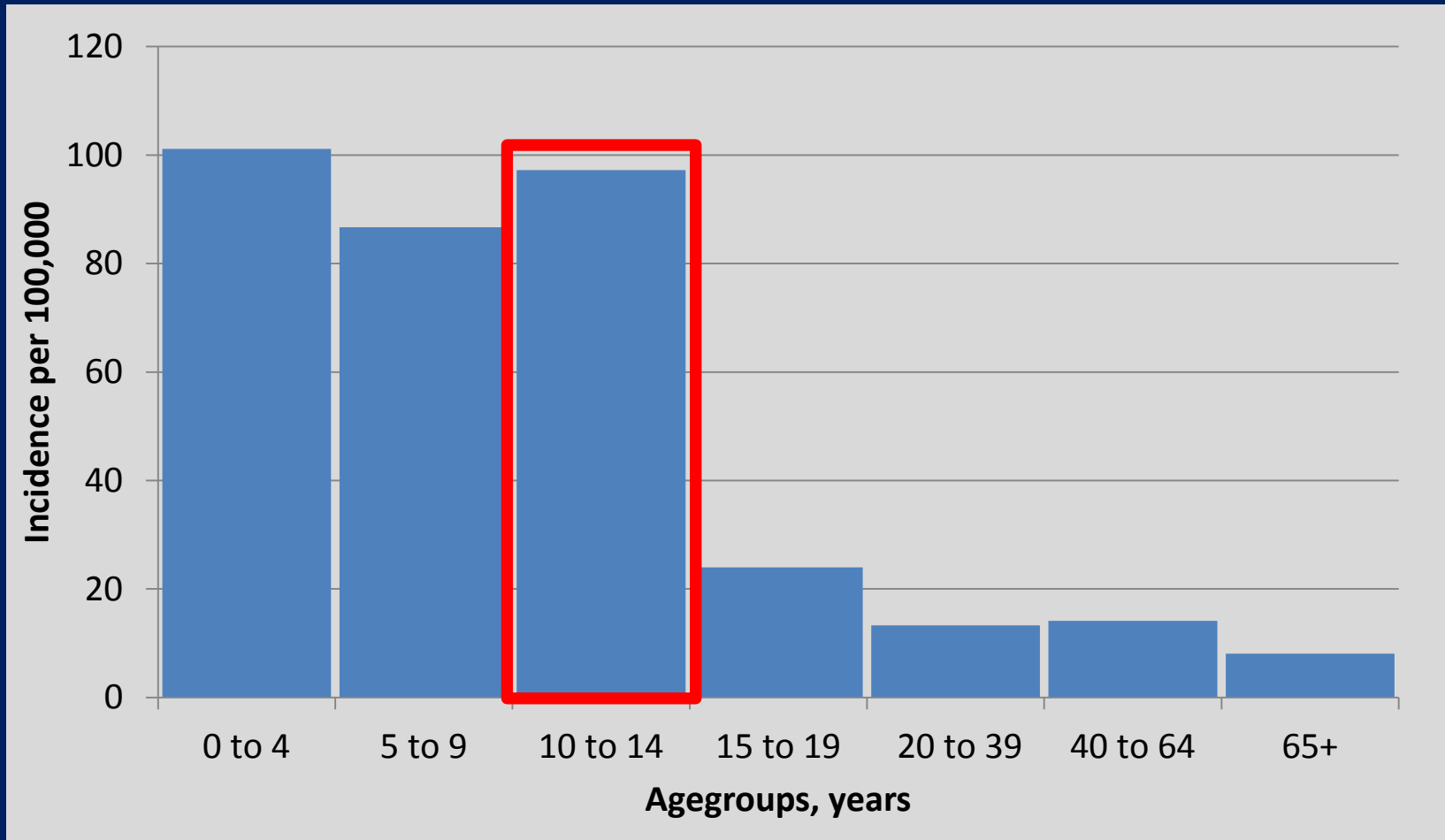
# Incidence of Pertussis by Age group, 2012



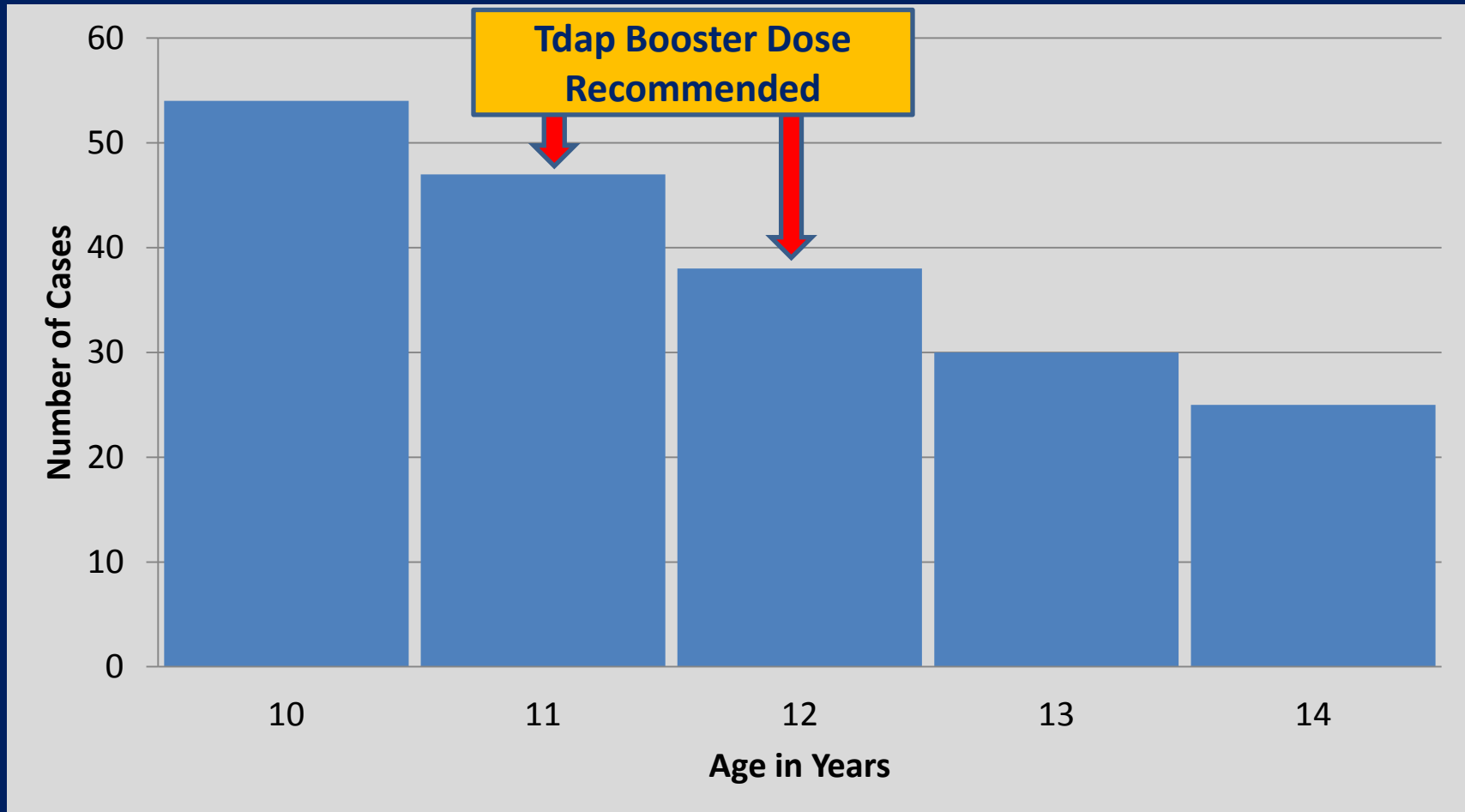
# Number of Cases of Pertussis by Age in Months, 2012



# Incidence of Pertussis by Age group, 2012



# Number of Pertussis Cases for Adolescents, 2012

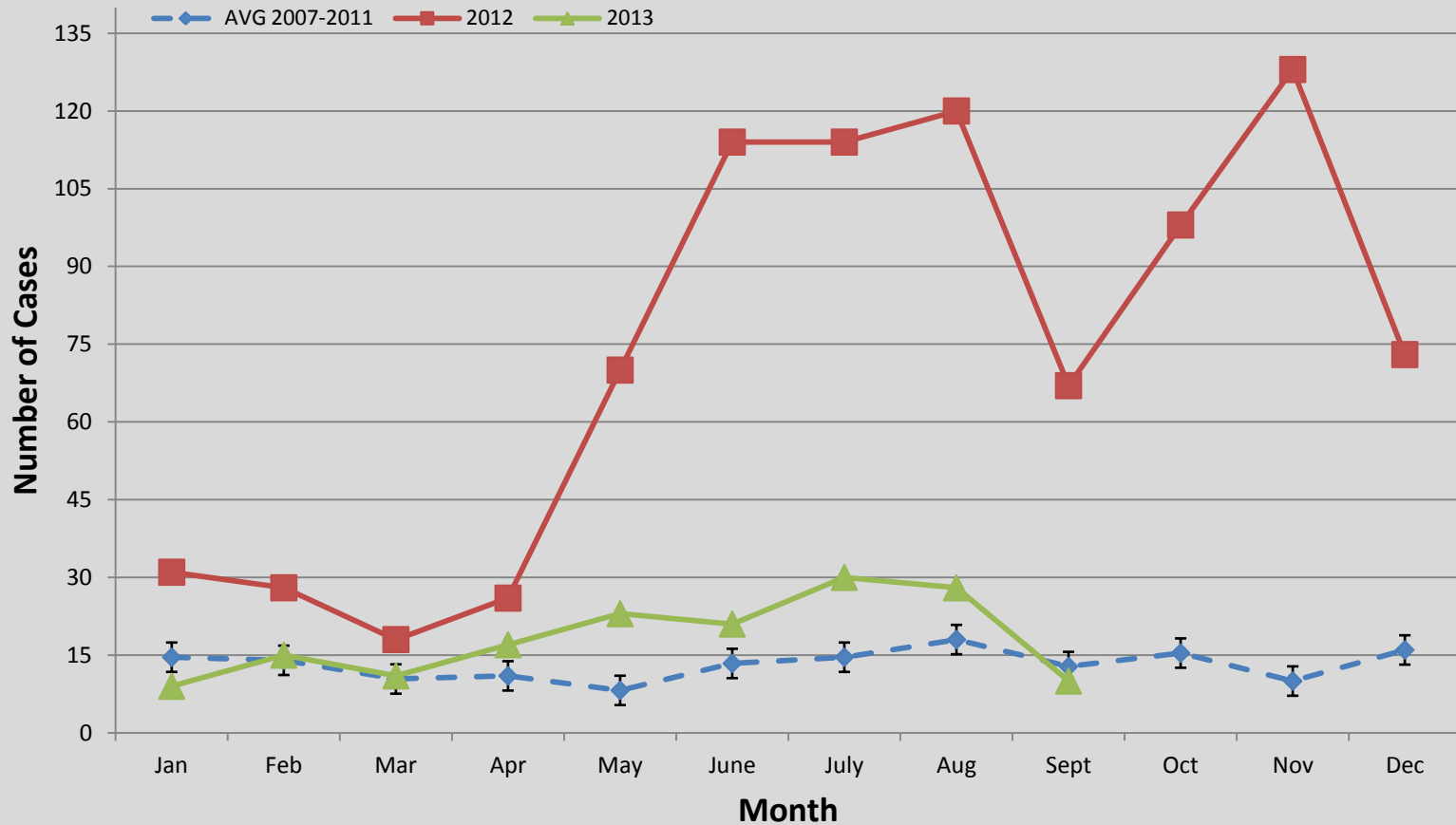


# Pertussis – Unvaccinated Cases

Age Group (yrs)	% of Unvaccinated Cases
0 to 4	15.7%
5 to 9	5.7%
10 to 19	2.1%
20 to 49	12.3%
50 to 74	20.7%
75+	25%



## Confirmed and Probable Cases by Month (Based off MMWR Year)



# Best Practices for Pertussis Testing

- Only test patients with symptoms of pertussis
- Asymptomatic close contacts should not be tested
- Only test patients during the first 3 weeks of cough when bacterial DNA is still present
- Do not test patients who have had >5 days of antibiotics
- Serology has limited usefulness in diagnosing pertussis and cannot be used as laboratory confirmation for surveillance purposes

# Conclusion

- **Most counties in the Eastern part of the state were affected**
- **Most pertussis reported in children younger than 15**
- **As infants received their doses of DTap at 2, 4, and 6 months the number of pertussis cases decreased**
- **As adolescents reach 11 and 12 years of age when Tdap is recommended the number of pertussis cases also decreased**
- **As of January 2013 pertussis cases have returned to baseline levels**

# **Varicella Outbreak Associated with Unvaccinated Children**

**Amie Worthington, Medical Investigator**

# Varicella (Chicken Pox)

- **Highly contagious respiratory disease**
- **Spread by direct person-to-person contact from infected respiratory tract secretions**
- **Also may occur by respiratory contact with airborne droplets**
- **Vaccine preventable**



American Academy of Pediatrics. N.d. Photograph.  
<http://www.cdc.gov/chickenpox/about/photos.html> Web. 16 Sep 2013.  
<<http://www.vaccineinformation.org/photos/variaap001.jpg>>.

# Varicella Outbreak

- April 2013, the Pottawatomie County Health Department notified the Kansas Department of Health and Environment (KDHE) of six cases of varicella within one household

# Varicella Outbreak

- Additional cases were identified and epi-linked to a church the ill family attended
- An outbreak investigation was initiated with the local health departments
  - Ill children were excluded from school for six days after rash onset or until the rash lesions were crusted
  - Susceptible contacts were either vaccinated within 24 hours or excluded for 21 days after the onset of the last reported illness
- Outbreak of varicella – five or more cases in a specific setting that are epi-linked

# Methods

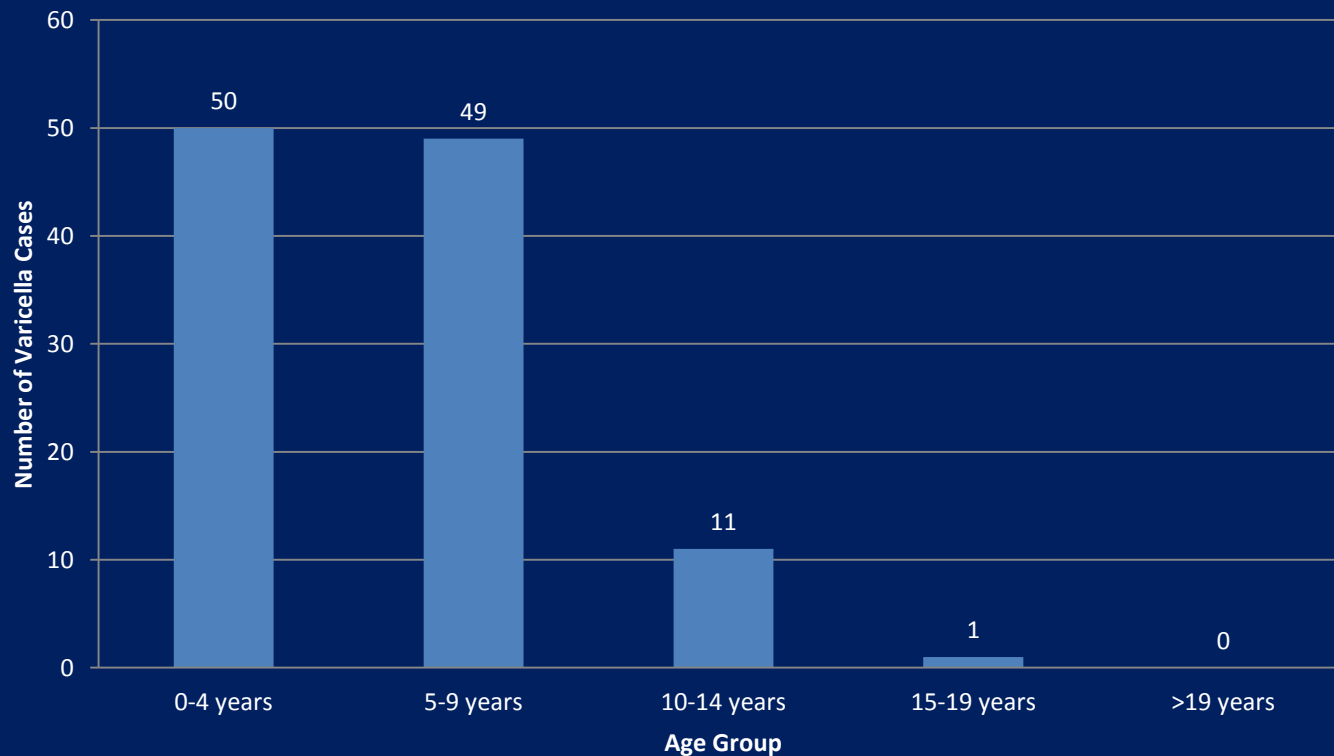
- **Reported cases of varicella were interviewed to assess:**
  - Onset date
  - Transmission setting
  - Severity of rash
  - Vaccination status
- **Contacts were identified to assess vaccination status**



# Results

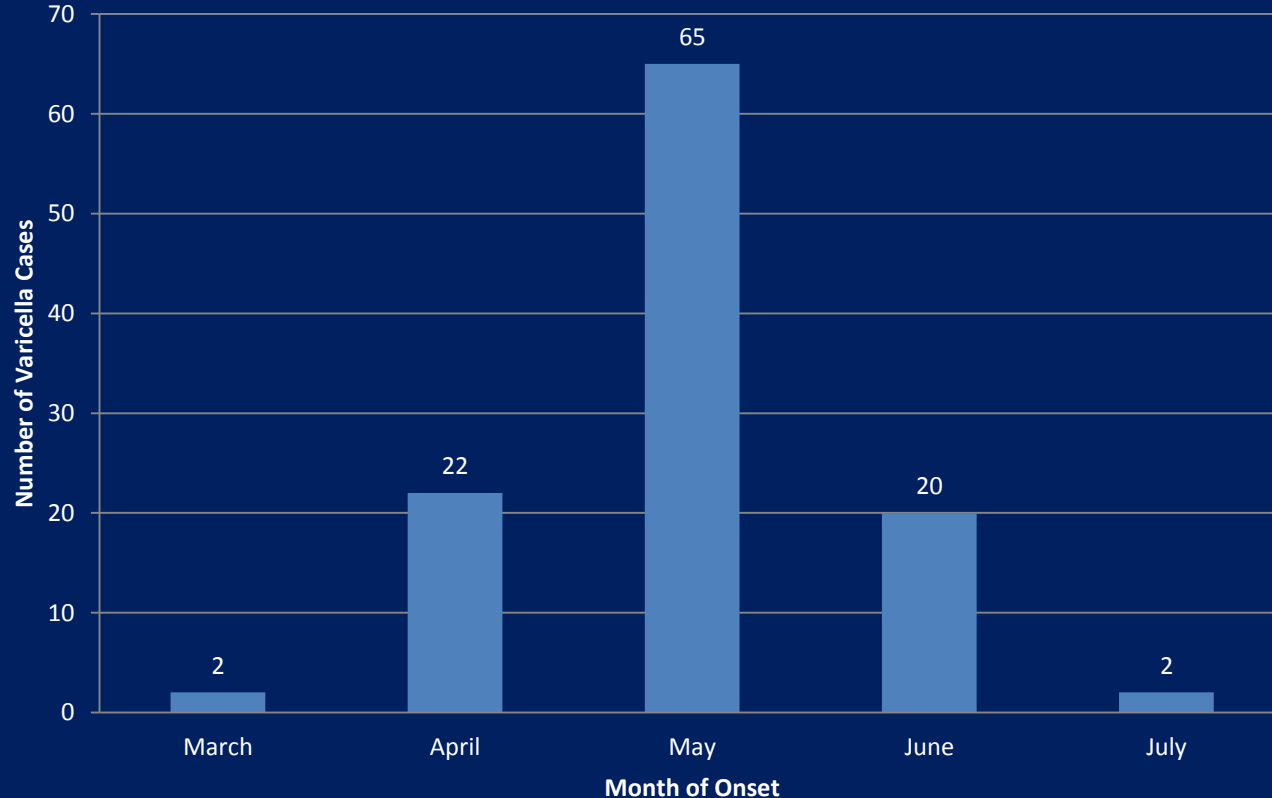
# Number and Age Range of Cases

- 111 cases identified
  - Ages range from less than one year to 15 years of age
  - Median 5 years



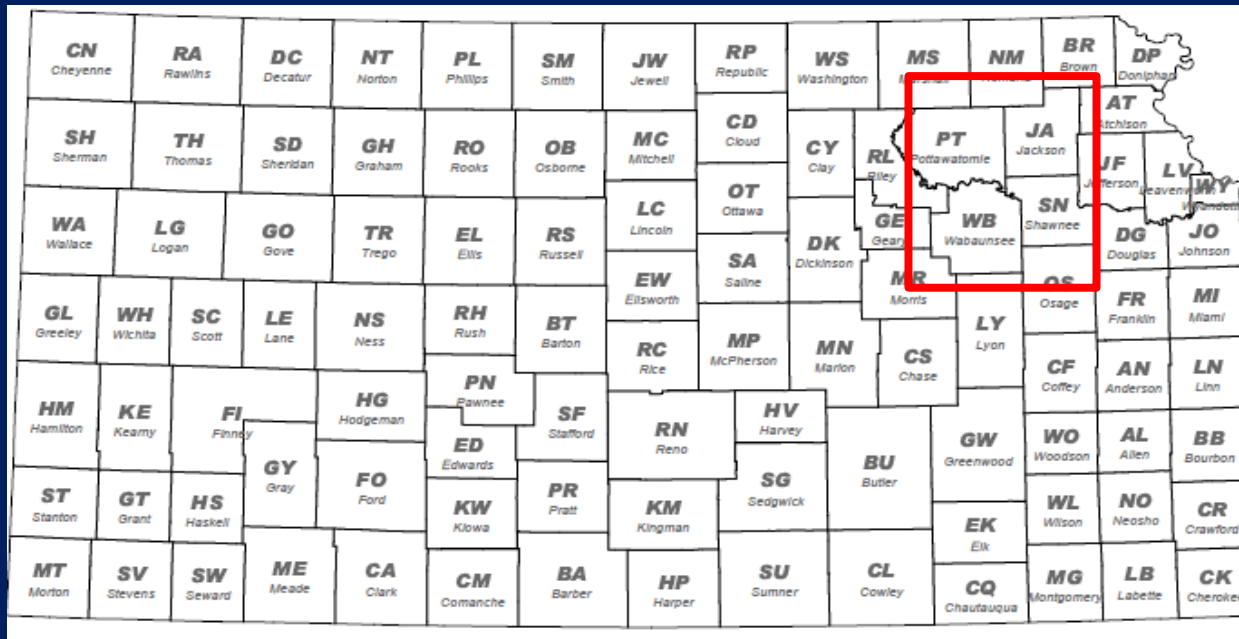
# Month of Onset Illness by Number of Cases

- Onset of illness ranged from March 26, 2013 to July 18, 2013.



# County of Residence

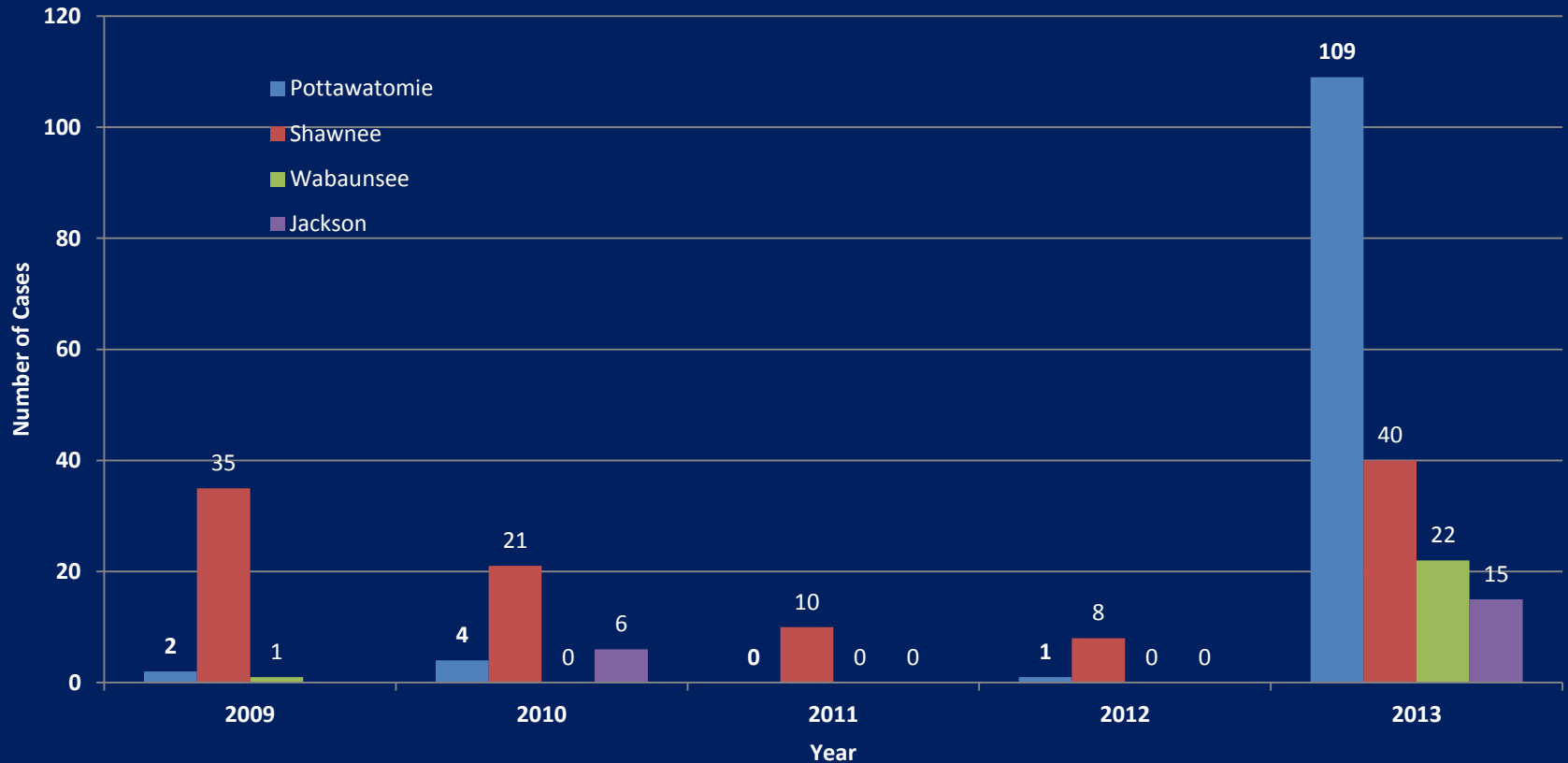
- Cases were identified from 4 counties
  - Pottawatomie - 73 (66%)
  - Wabaunsee - 22 (20%)
  - Shawnee - 11 (0.1%)
  - Jackson - 5 (0.05%)
- 56 cases were associated with a school



# Vaccination Status

- **103 (93%) of 111 cases were unvaccinated**
  - **91 parents either reported refusing vaccine or claimed religious exemption**
  - **7 were too young to be vaccinated**
  - **3 reported history of disease**
  - **2 had unknown vaccination status**

# Varicella Cases by Year



# Conclusions

- One of the largest varicella outbreaks KDHE has investigated
- Low estimate of actual cases
- Difficult to control
- Most cases under the age of 10
- Highly unvaccinated community

# Questions





# Influenza Surveillance Update

**Amie Worthington, Influenza Surveillance Coordinator**

# Objectives

- Describe influenza surveillance in Kansas.
- Discuss the quadrivalent and vaccines produced via non-egg based technologies.

# Influenza Surveillance

*Haemophilus influenza* , invasive disease

Hantavirus Pulmonary Syndrome

Hemolytic uremic syndrome, postdiarrheal

Hepatitis, viral (acute and chronic)

Hepatitis B during pregnancy

Human Immunodeficiency Virus (HIV) (includes Viral Load Tests)

Influenza deaths in children <18 years of age

Legionellosis

Leprosy (Hansen disease)

Listeriosis

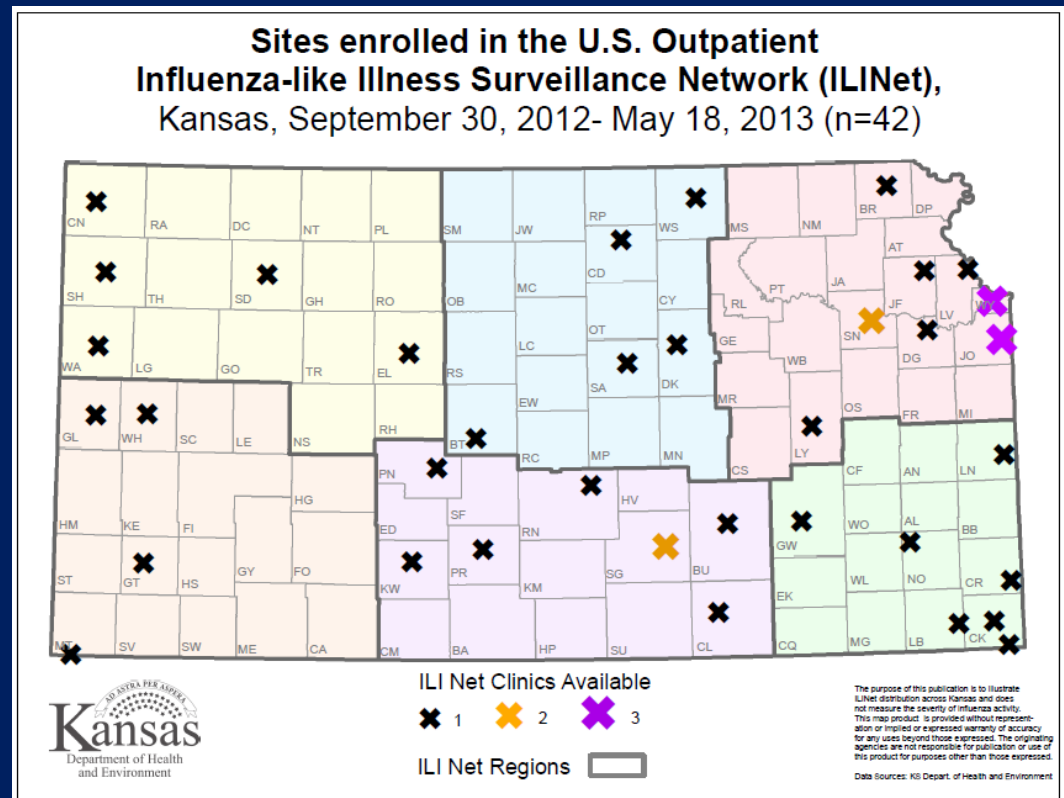
Lyme disease

Malaria

Outbreaks, unusual occurrence of any disease, exotic or newly recognized diseases, and suspect acts of terrorism should be reported within 4 hours by telephone to the Epidemiology Hotline: 877-427-7317

# ILINet

- Tracks Influenza-Like Illness (ILI) in participating outpatient settings
- ILI Definition: Fever ( $>100^{\circ}\text{F}$ ) **AND** cough and/or sore throat



# ILINet

- Sites report weekly
- Reports include ILI cases and total number of patients seen

Number of Patients with ILI	
0-4 years	<input type="text"/>
5-24 years	<input type="text"/>
25-49 years	<input type="text"/>
50-64 years	<input type="text"/>
>64 years	<input type="text"/>

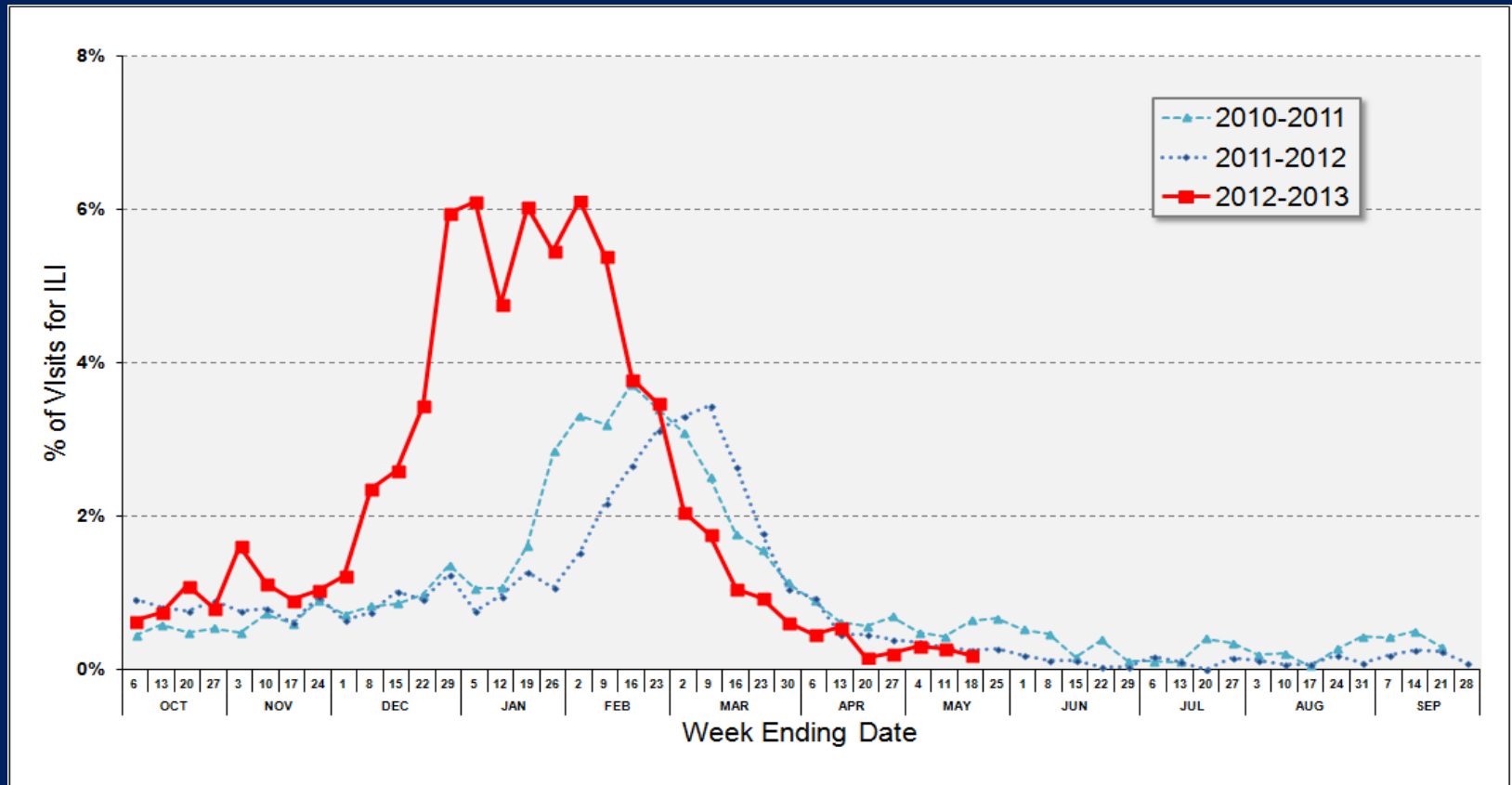
**Influenza-like Illness**  
Fever ( $\geq 100^{\circ}$  F [ $37.8^{\circ}$  C], oral or equivalent)  
-AND-  
cough and/or sore throat  
(in the absence of a known cause other than influenza)

**Note:**  
There is no requirement for a positive influenza test (i.e. rapid antigen test) when determining the number of patients with ILI.

Total Number of Patients Seen For Any Reason
(Total of ILI + Non-ILI cases for all age groups combined)
<input type="text"/>

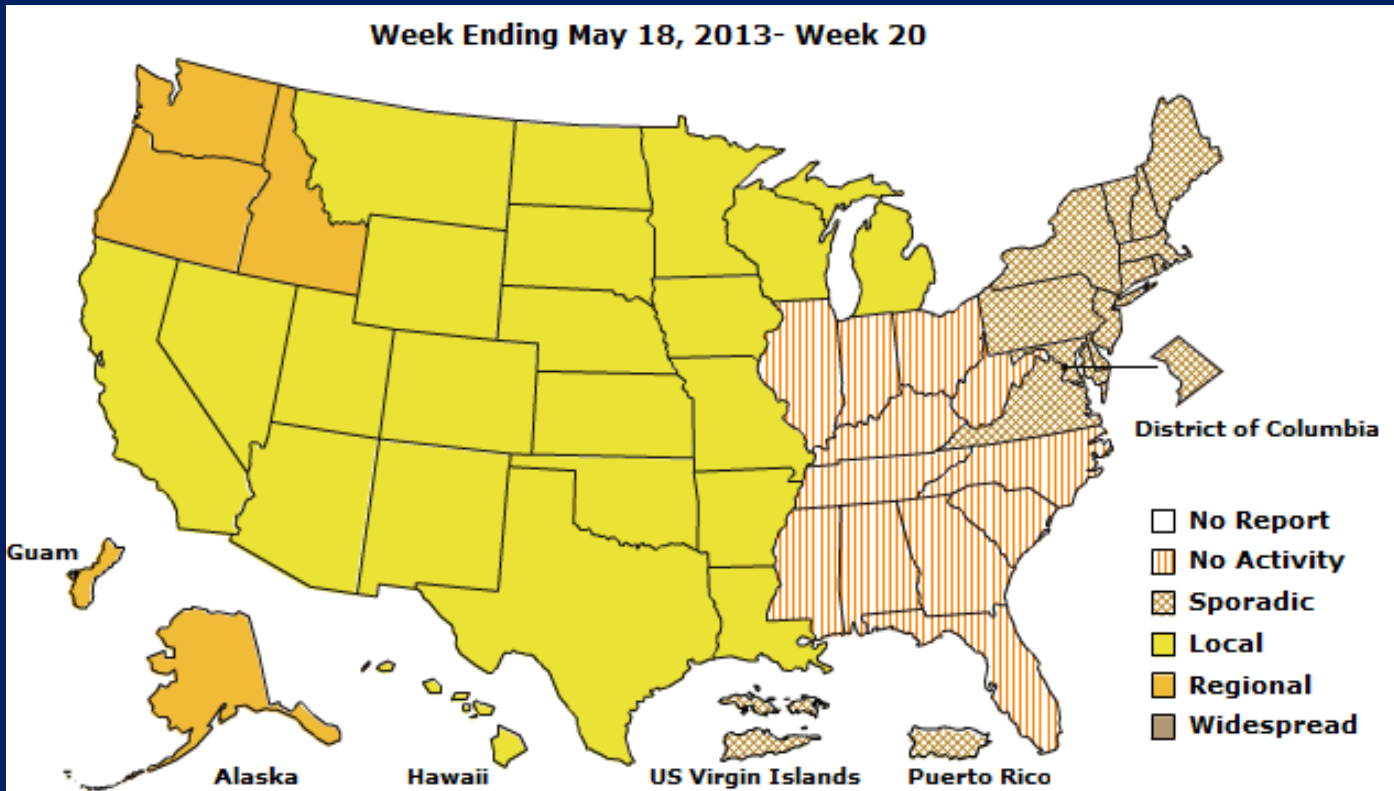
# ILINet

## Percentage of visits for influenza-like illness



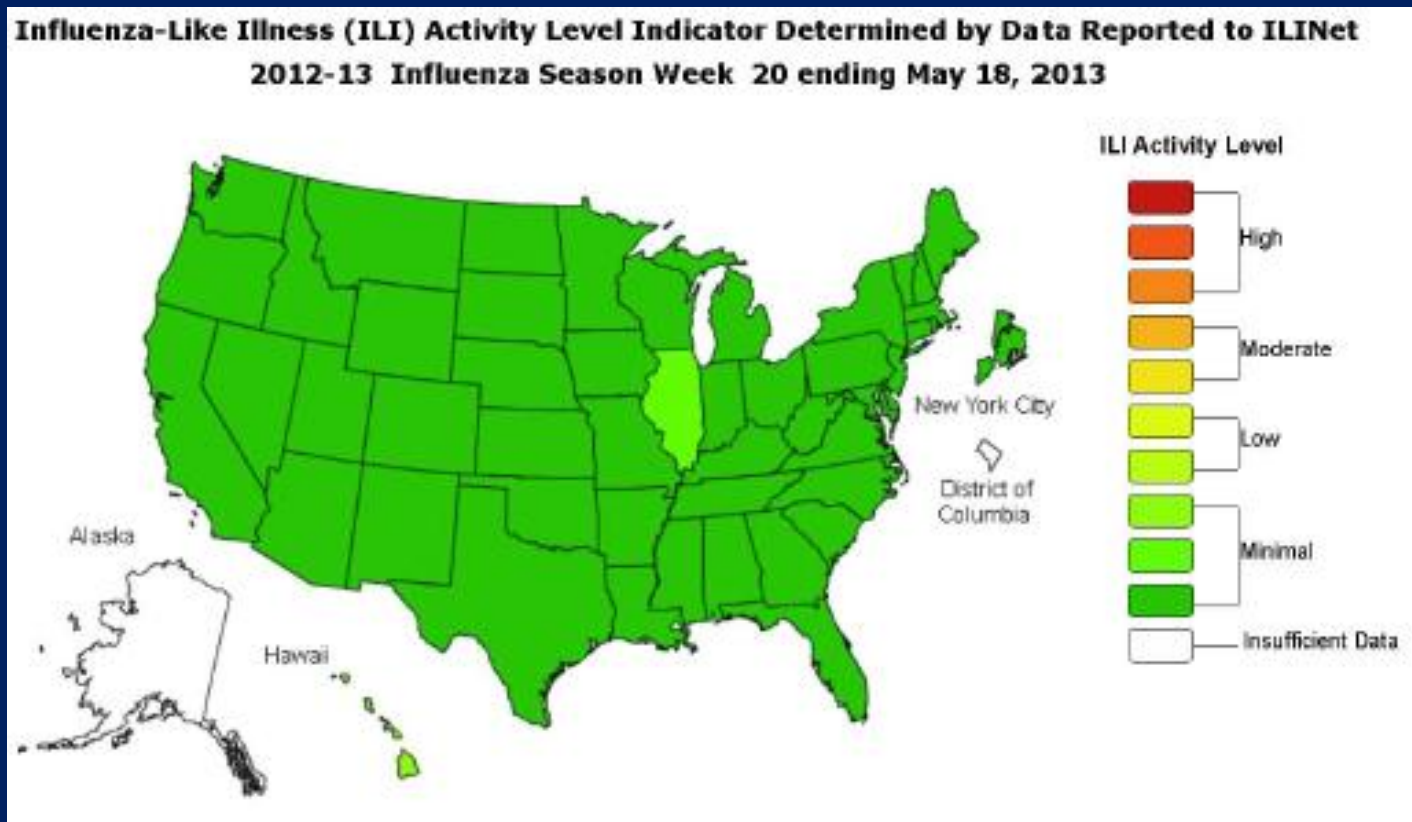
# ILINet

- Kansas reports data to CDC
- Geographic spread of reported ILI



# ILINet

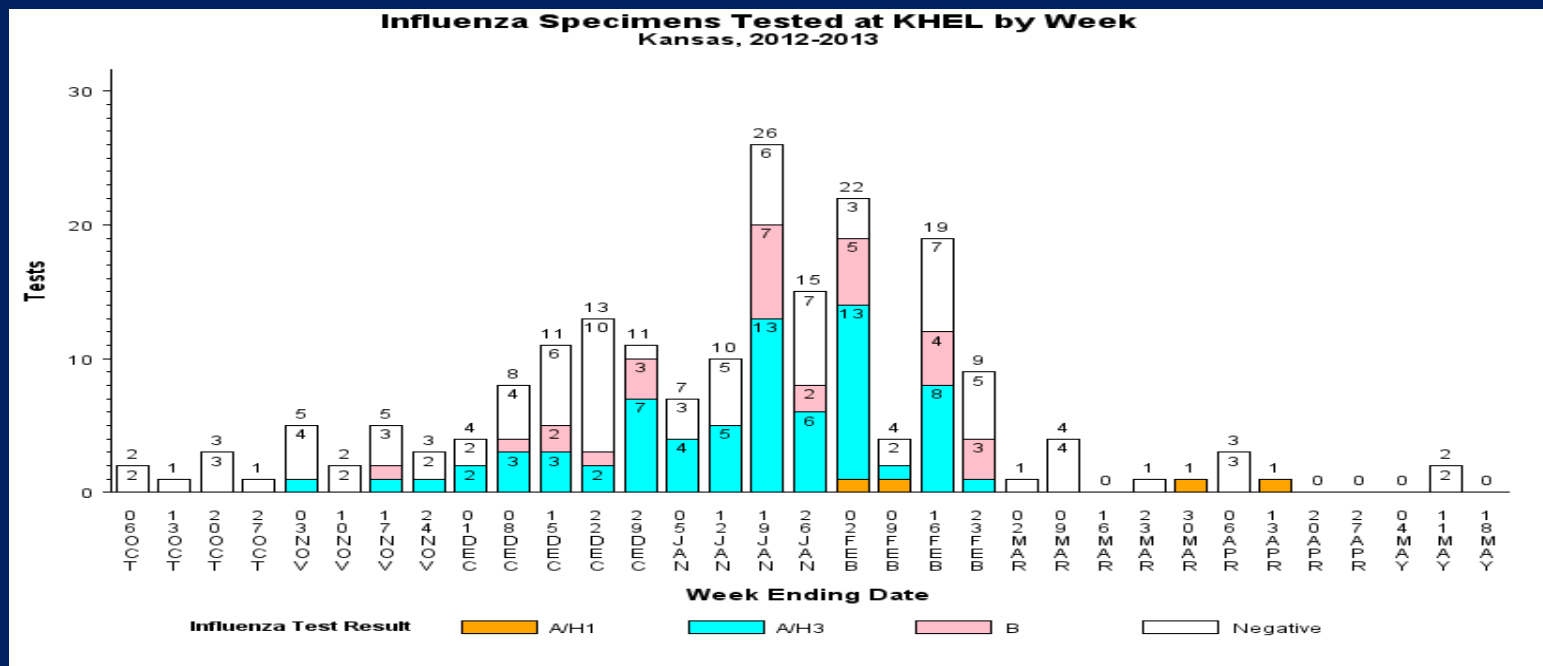
- Kansas reports data to CDC
- Intensity map of reported ILI





# Laboratory Surveillance

- ILINet sites submit 1 specimen per week to the Kansas Health and Environmental Laboratories (KHEL)
  - NP or Nasal
  - KHEL performs PCR testing
  - Determines Type (A/H1, A/H3, or B)



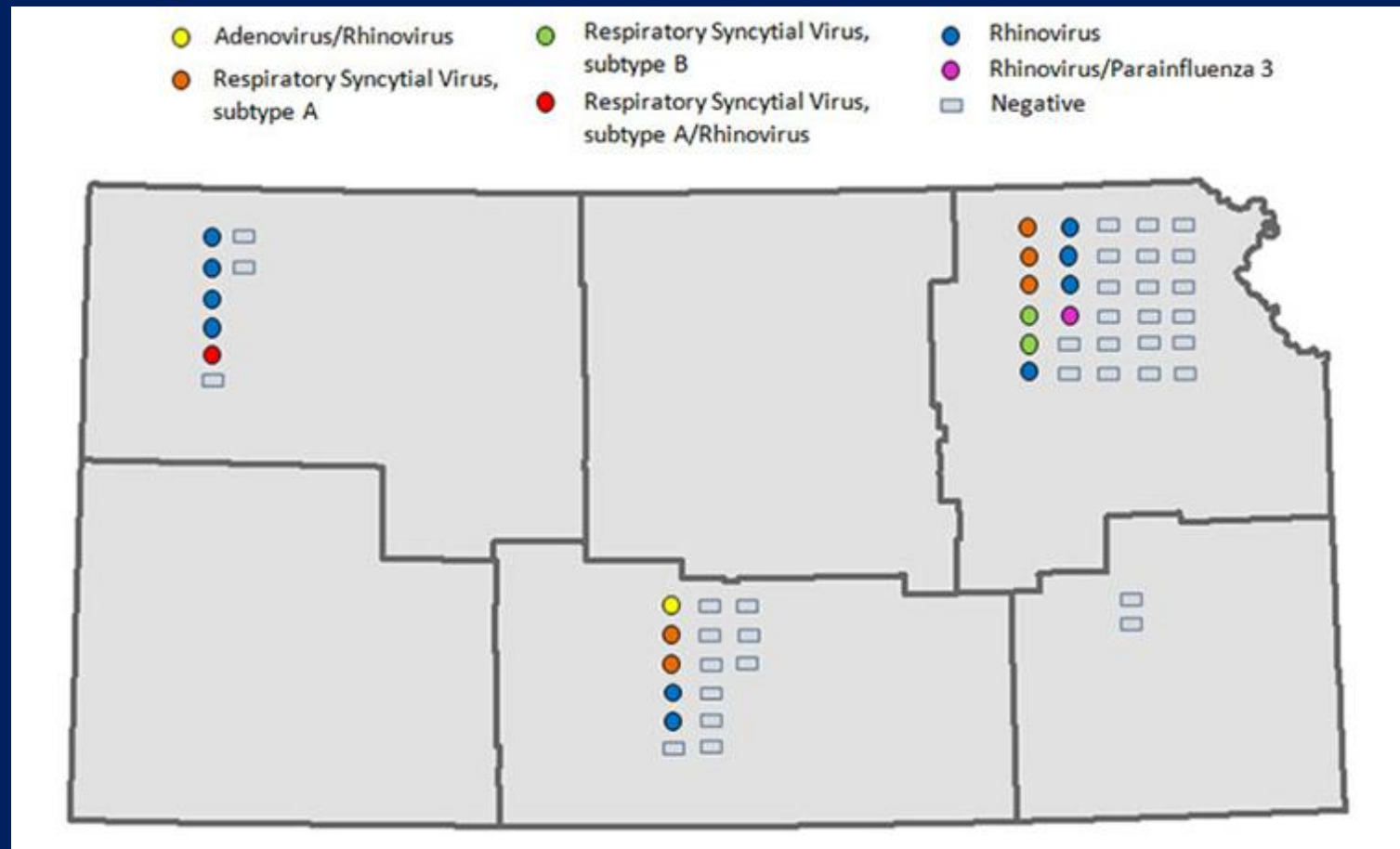
# Laboratory Surveillance

- PCR negative specimens were tested with the Luminex assay
- The Luminex assay can probe for 12 viral targets per specimen:

- Influenza A
- Influenza A, Subtype H1
- Influenza A, Subtype H3
- Influenza B
- Respiratory Syncytial Virus, Subtype A
- Respiratory Syncytial Virus, Subtype B

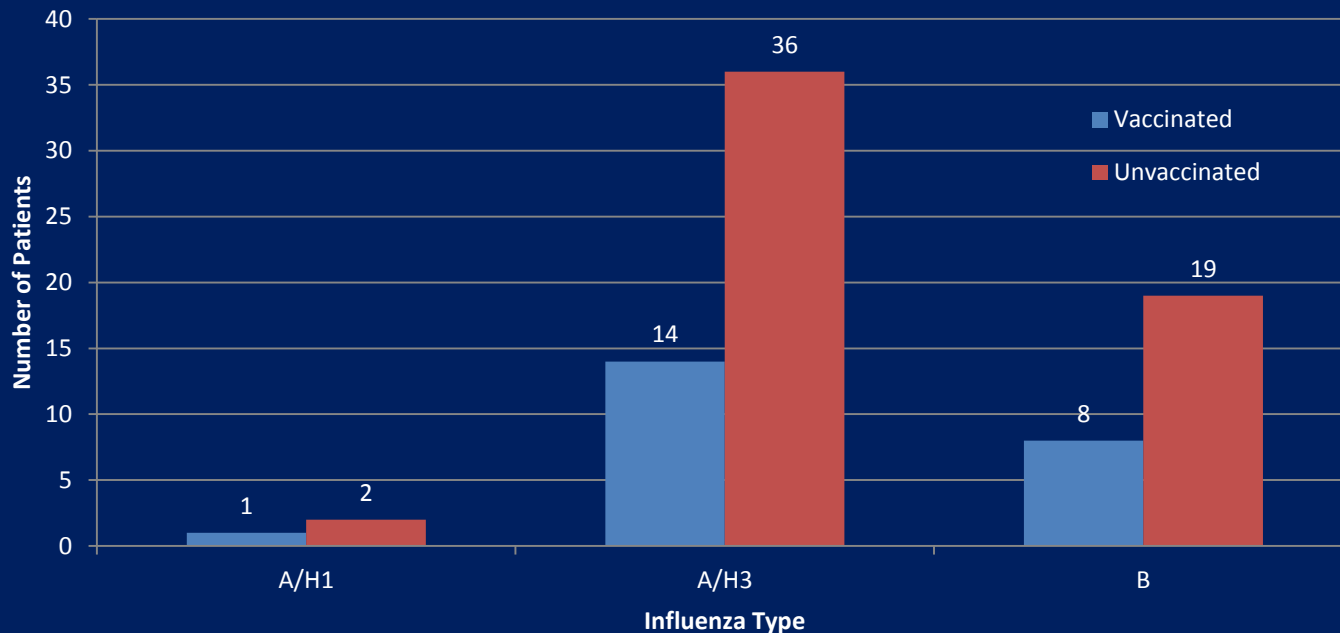
- Parainfluenza 1
- Parainfluenza 2
- Parainfluenza 3
- Human Metapneumovirus
- Rhinovirus
- Adenovirus

# Laboratory Surveillance



# 2012-2013 Vaccine Effectiveness

- 23 of 80 patients with known vaccination status were vaccinated and tested positive for influenza



# 2013-2014 Influenza Vaccine

- **Trivalent vaccine influenza virus:**
  - A/California/7/2009 (H1N1)pdm-09-like virus;
  - A/Victoria/361/2001 (H3N2)-like virus;
  - B/Massachusetts/2/2012-like virus.
- **Quadrivalent vaccine includes additional B virus:**
  - B/Brisbane/60/2008-like virus.

# Vaccines Produced via Non-Egg Based Technologies

- A trivalent influenza vaccine approved by the FDA for use in adults ages 18 to 49
- Does not use the influenza virus or chicken eggs in its manufacturing process

# Questions



# **Immunization Toolkit: Influenza and Pneumococcal Vaccination of Residents in Long-Term Care Facilities (LTCFs)**

**Chelsea Raybern, Epidemiologist**



# Objectives

- **Describe reasons for developing toolkit**
- **Discuss contents of toolkit**
- **Discuss timeline of development**

# Influenza - Epidemiology

- **Flu season occurs early as October to late as May**
- **Affects 5-20% U.S. population, affects more than 50% of individuals in closed communities**
- **>200,000 people hospitalized for flu-related complications annually**
  - **More than 60% occur in persons 65 years and older**
- **From 1976-2006, # of deaths ranged from 3,000 to 49,000**
  - **Approximately 90% occur in persons 65 years and older**

# Influenza – Vaccine Effectiveness

- **Vaccine has shown to be:**
  - **50-60% effective in preventing flu-related hospitalizations**
  - **80% effective in preventing flu-related deaths**
- **Vaccine prevented 77% of hospitalizations in adults  $\geq 50$  years of age during 2011-2012 flu season**

# Pneumococcal Disease - Epidemiology

- Occurs year round
- Kills more people in U.S. than all other vaccine-preventable diseases (VPD) combined and highest mortality occurs among elderly and people with underlying medical conditions

# Pneumococcal Disease - Epidemiology

- **Causes severe infections:**
  - **Pneumonia** – more than 900,000 cases annually; 400,000 hospitalizations, 5-7% result in death
  - **Bacteremia** – more than 12,000 cases annually; 15% result in death
  - **Meningitis** – roughly 3,000 cases annually; 10% result in death
- **Adults account for 95% of pneumococcal deaths in U.S.**

# Pneumococcal Disease – Vaccine Effectiveness

- **Pneumococcal polysaccharide vaccine (PPSV23) has shown to be 50-80% effective in preventing invasive pneumococcal infection in immunocompetent elderly persons and adults with underlying conditions**

# LTCF Resident Coverage Levels in Kansas

- **Influenza (2011-2012, 2012-2013 flu seasons)**
  - **Kansas average – 76%**
  - **National average – 78%**
  - **Healthy People 2020 (HP2020) objective – 90%**
- **Pneumococcal (October 2011 – March 2013)**
  - **Kansas average – 82%**
  - **National average – 76%**
  - **HP2020 objective – 90%**

# Facility Level Coverage – 2011

- **Influenza**
  - 170 (69%) of 248 facilities had <90% coverage
- **Pneumococcal**
  - 164 (64%) of 255 facilities had <90% coverage



# Toolkit Contents

- **Flu and pneumococcal disease information**
- **Myth/fact sheets**
- **Vaccine information statements (VIS)**
- **Vaccination uptake paper tracking methods**
- **Model language for resident consent and declination forms**
- **Model language for standing orders on vaccination of residents**
- **Outbreak control**

# Delivery and Implementation

- **Provide printed and electronic toolkits**
- **Implement this flu season**
- **Getting the word out through Kansas Health Care Association and Leading Age Kansas**

# Vaccination Coverage Assessments

**Chelsea Raybern, Epidemiologist**  
**Elizabeth Lawlor, Advanced Epidemiologist**

# ADULT: FOUR-YEAR COLLEGES AND UNIVERSITIES

Full report can be found at:

[http://www.kdheks.gov/immunize/download/College\\_Report\\_2013.pdf](http://www.kdheks.gov/immunize/download/College_Report_2013.pdf)



# Background

- **Objective: to determine current VPD immunization requirements of four-year colleges and universities in Kansas**
- **Kansas has no law regarding immunization requirements for colleges and universities**
- **Kansas Board of Regents Mandate**
  - “Effective at the start of the 2006-07 academic year, each state university shall have in place policies and procedures requiring that all incoming students residing in student housing be vaccinated for meningitis. Such policies shall include appropriate waiver procedures for those who refuse to take the vaccine.”

# Methods

- **Collected list of four-year colleges/universities**
  - **Excluded specialized schools and satellite schools**
- **Survey developed and administered via telephone**
  - **Nine questions regarding existence of policy, immunizations included in policy, immunizations offered by school, etc.**
  - **Administered to student health services representative OR individual most knowledgeable about immunization policies**
- **Descriptive analysis using SAS® 9.3**

# RESULTS

# Four-Year Colleges and Universities with Immunization Policy

Kansas four-year  
colleges/universities

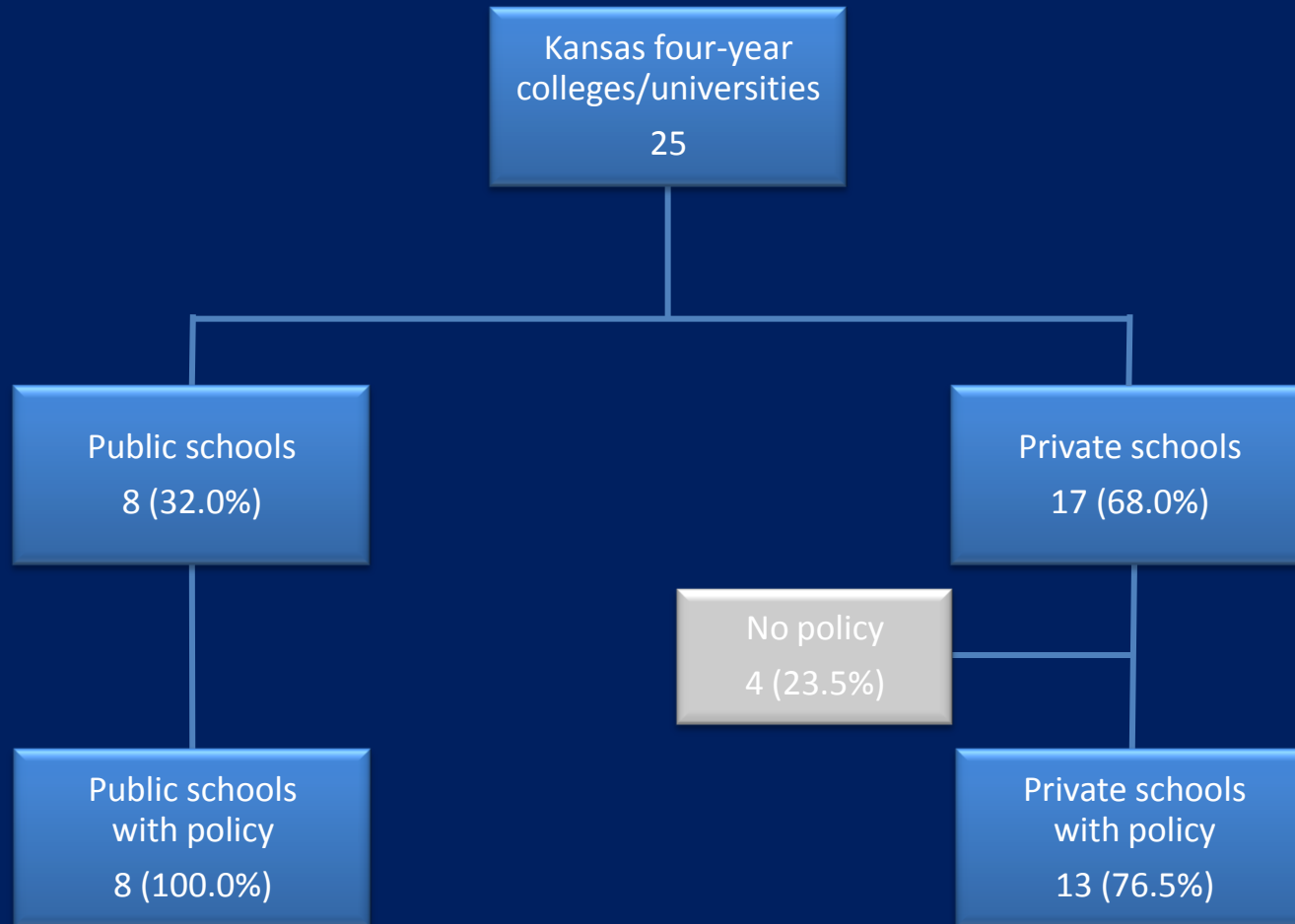
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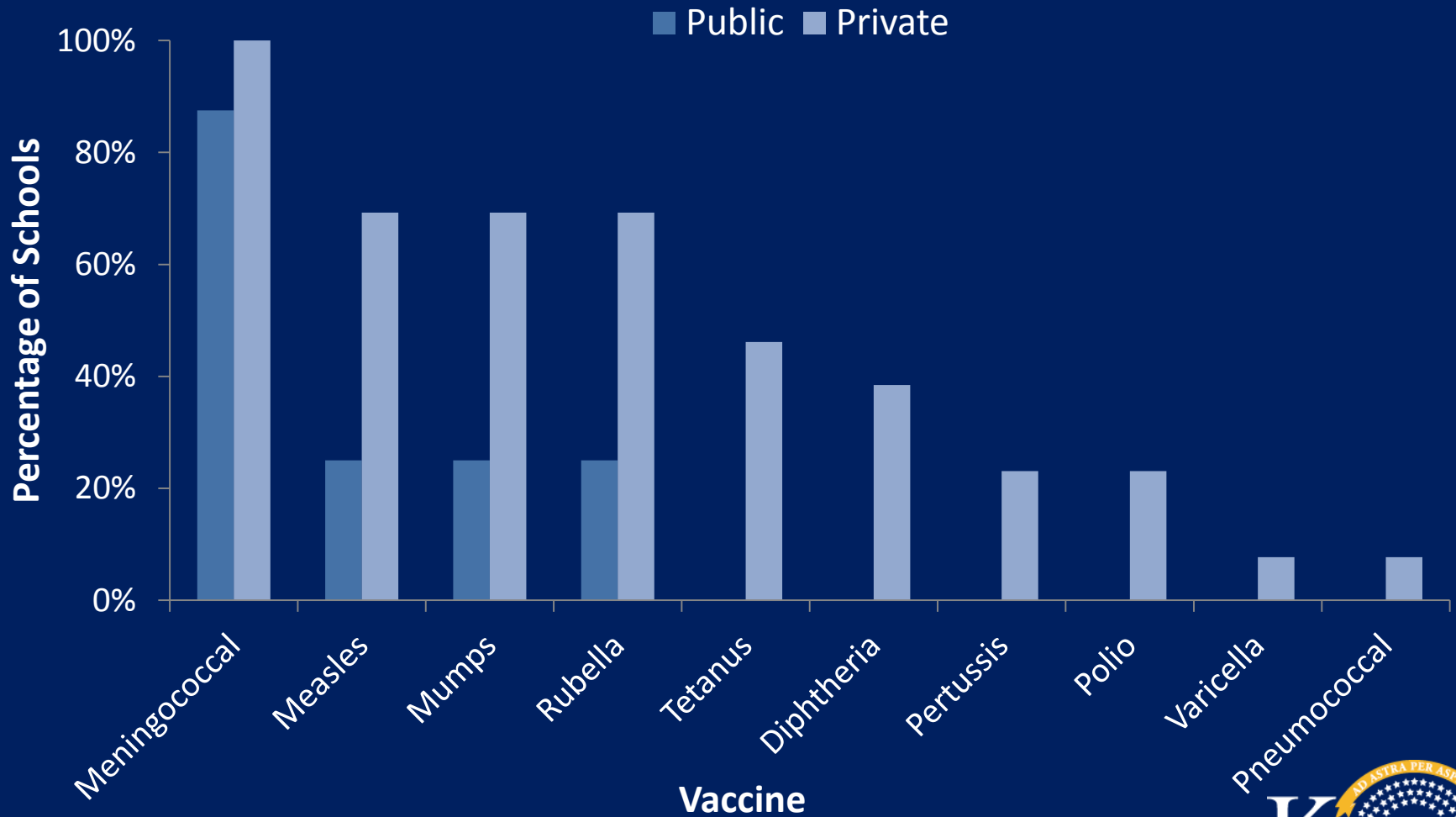
# Four-Year Colleges and Universities with Immunization Policy



# Four-Year Colleges and Universities with Immunization Policy



# Immunizations Required by Four-Year Colleges and Universities in Kansas\*



\*No schools require vaccination of influenza, Hepatitis A, Hepatitis B, or HPV

# Time Frame for Compliance

- **Public universities**
  - **8 public schools with immunization policy**
    - **6 (75.0%) require students to be compliant before starting school (when applying to school, before registering for classes, and before moving into on-campus housing)**
- **Private colleges/universities**
  - **13 private schools with immunization policy**
    - **5 (38.5%) require students to be compliant before starting school (when applying to school, before registering for classes, and before moving into on-campus housing)**

# Four-Year Colleges and Universities that Offer Immunizations

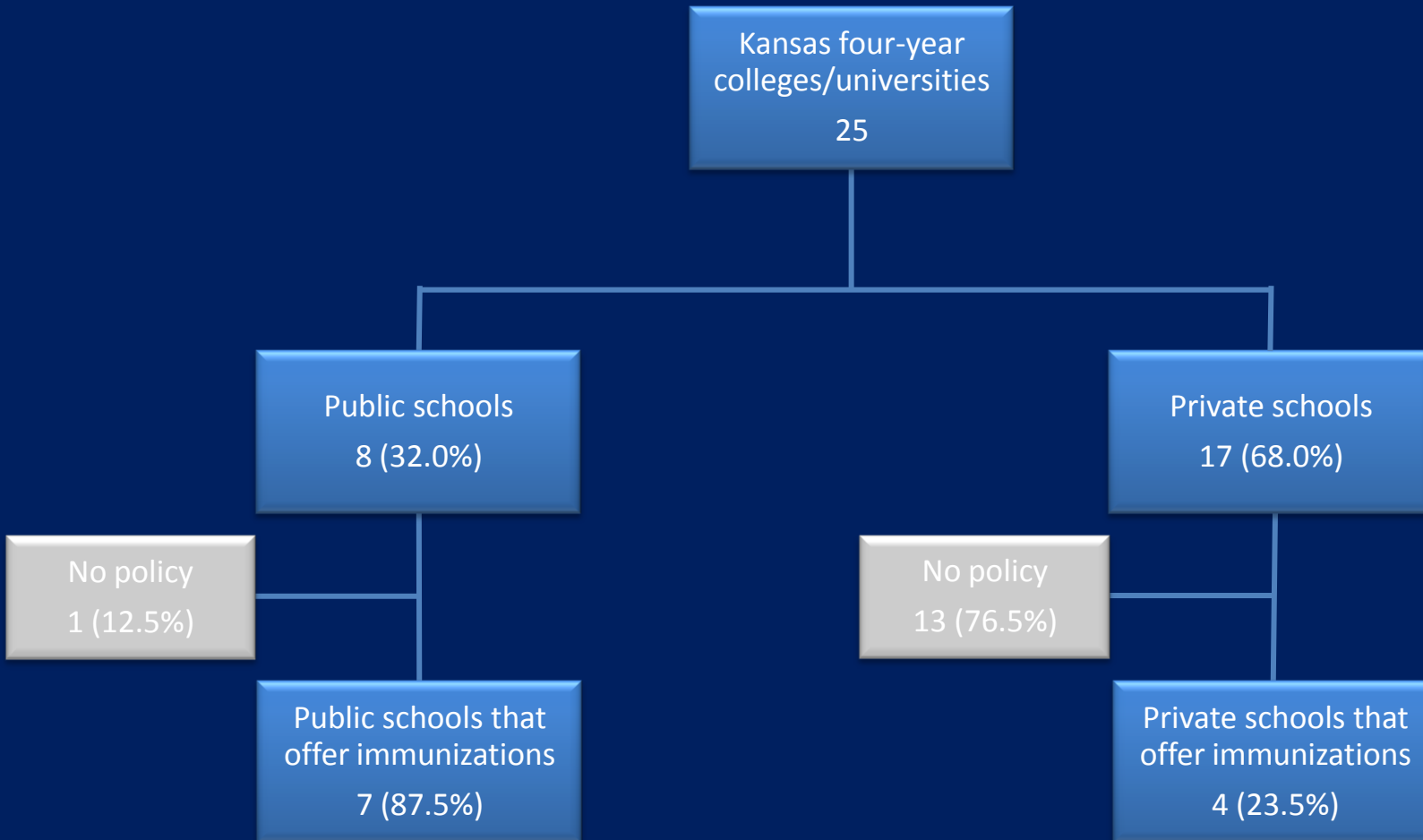
Kansas four-year  
colleges/universities

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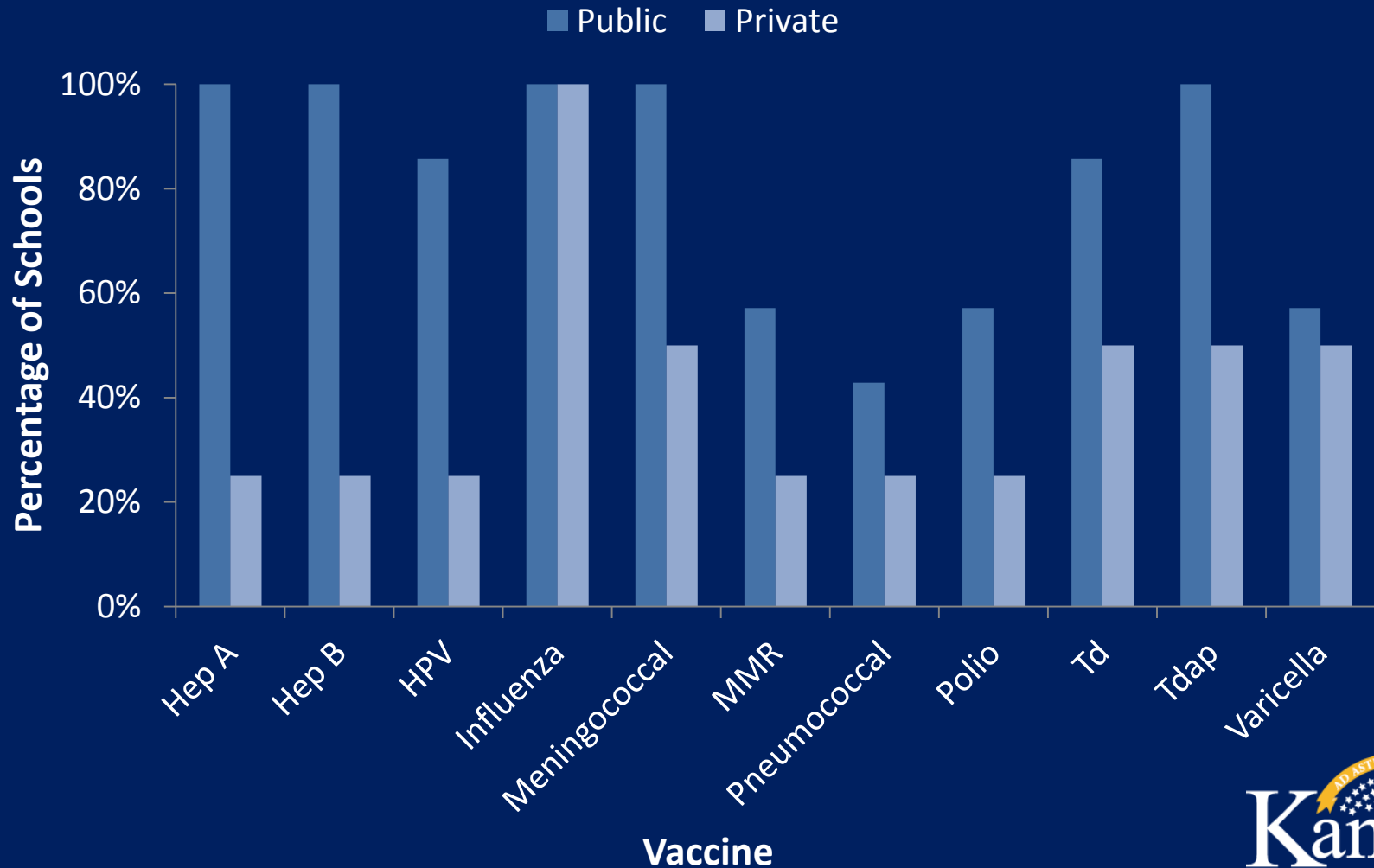
# Four-Year Colleges and Universities that Offer Immunizations



# Four-Year Colleges and Universities that Offer Immunizations



# Immunizations Offered by Four-Year Colleges and Universities in Kansas





# Survey Limitations

- **Validity of survey responses unknown**
- **Up-to-date status requirements of students unknown**
- **Only assessed immunization requirements of four-year college and university main campuses**

# CONCLUSIONS

# Overall

- **>80% of four-year colleges/universities in Kansas have immunization policy**
- **~50% require immunization against more than one VPD**
- **~50% require compliance before starting school**
- **More institutions do not offer immunizations than those that do**

# Public vs. Private

- Larger proportion of public institutions have immunization requirement
- Larger proportion of private require immunization against multiple diseases
- Larger proportion of public require compliance before start of school
- Larger proportion of public offer immunizations to students

# ADOLESCENT: 6<sup>TH</sup>, 7<sup>TH</sup>, AND 8<sup>TH</sup> GRADE STUDENTS

# Background

- **Objective:** evaluate 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grade students in Kansas that are up-to-date on required and recommended vaccinations
- **Immunization goals for adolescents by 13-15 years of age – HP2020:**
  - 80% coverage for 1 Tdap dose
  - 90% coverage for 2 varicella doses (exclude those with disease history)
  - 80% coverage for 1 meningococcal conjugate dose
  - 80% coverage for 3 human papillomavirus (HPV) doses

# Background

- **Kansas required vaccinations:**

- 6<sup>th</sup> grade**

- Single dose of varicella (or history of disease)

- 7<sup>th</sup> grade**

- Two doses of varicella (or history of disease)
    - Single dose of Tdap

- 8<sup>th</sup> grade**

- Two doses of varicella (or history of disease)
    - Single dose of Tdap

- **Recommended vaccines:**

- Initial dose of MCV4 for 11 to 12 year-olds
  - Three doses of HPV for 11 to 12 year-olds

# Methods

- **Survey sent to all schools with 6<sup>th</sup>, 7<sup>th</sup>, and/or 8<sup>th</sup> grades**
  - **Number of students with up-to-date immunizations**
  - **Number of students with exemptions**
  - \*If school used WebIZ, they did not have to complete survey**
- **Sample of schools with 6<sup>th</sup>, 7<sup>th</sup>, and/or 8<sup>th</sup> grades to validate schools responses**
- **Analysis using SAS® 9.3**



# RESULTS

# 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> Grade Schools in Kansas



Schools that responded  
499 of 588 (85%)

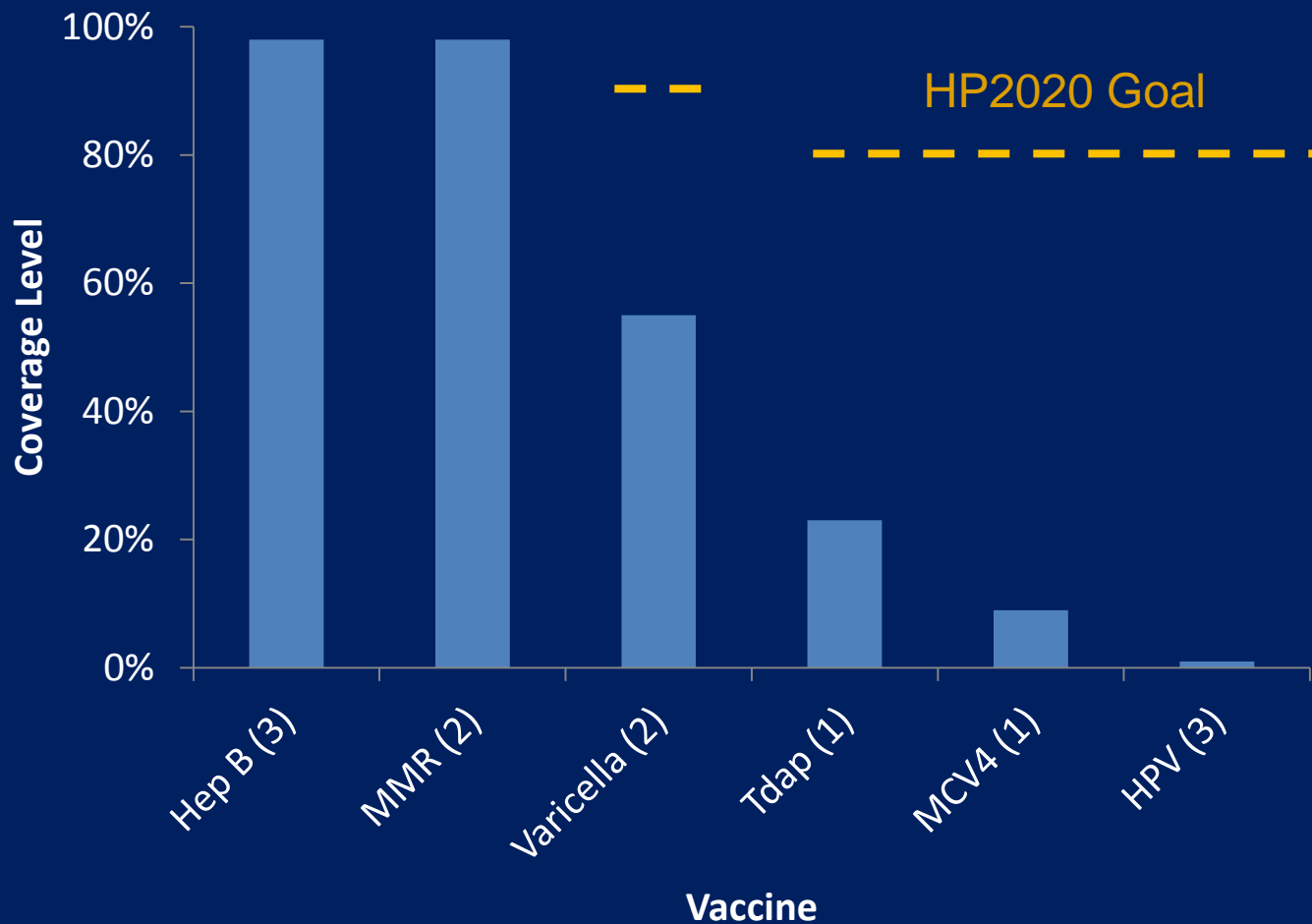


Schools that responded  
421 of 507 (83%)



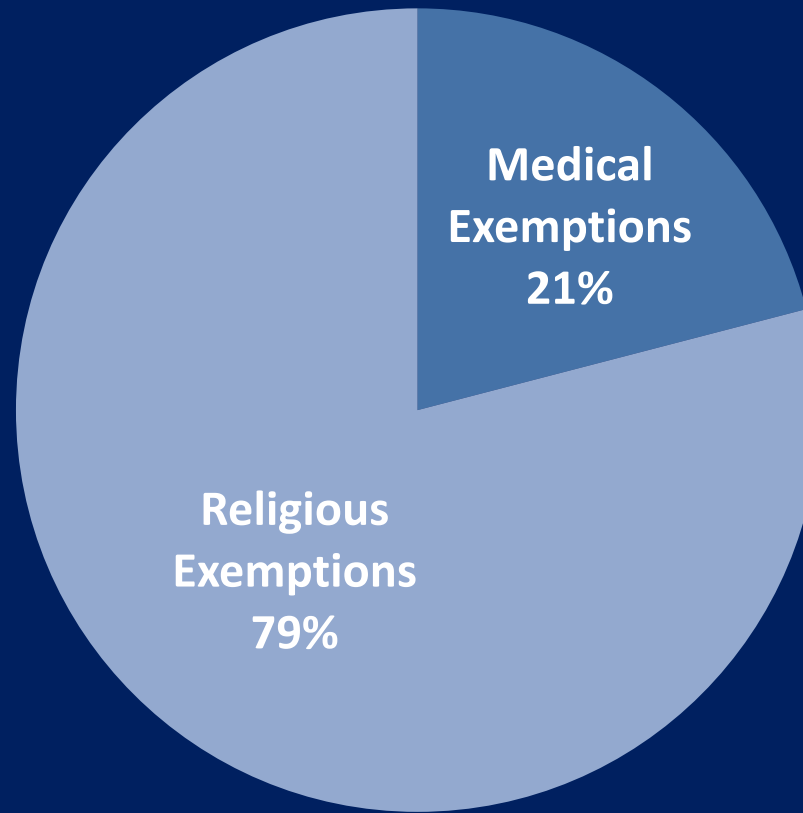
Schools that responded  
417 of 496 (84%)

# 6<sup>th</sup> Grade Up-to-Date



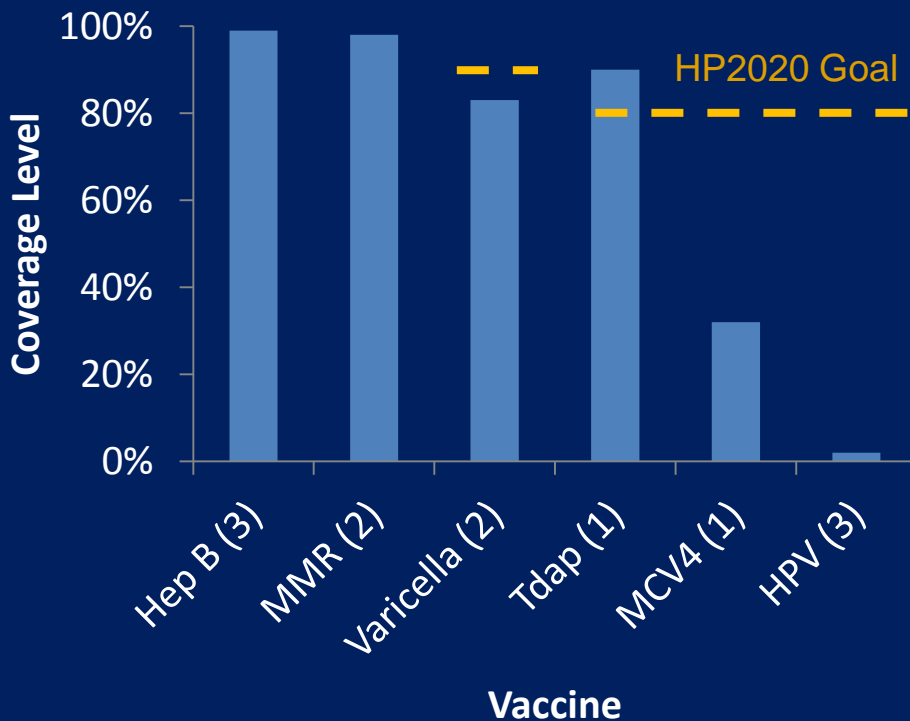
# 6<sup>th</sup> Grade Exemptions

**Total number of exemptions: 315 (1%)**

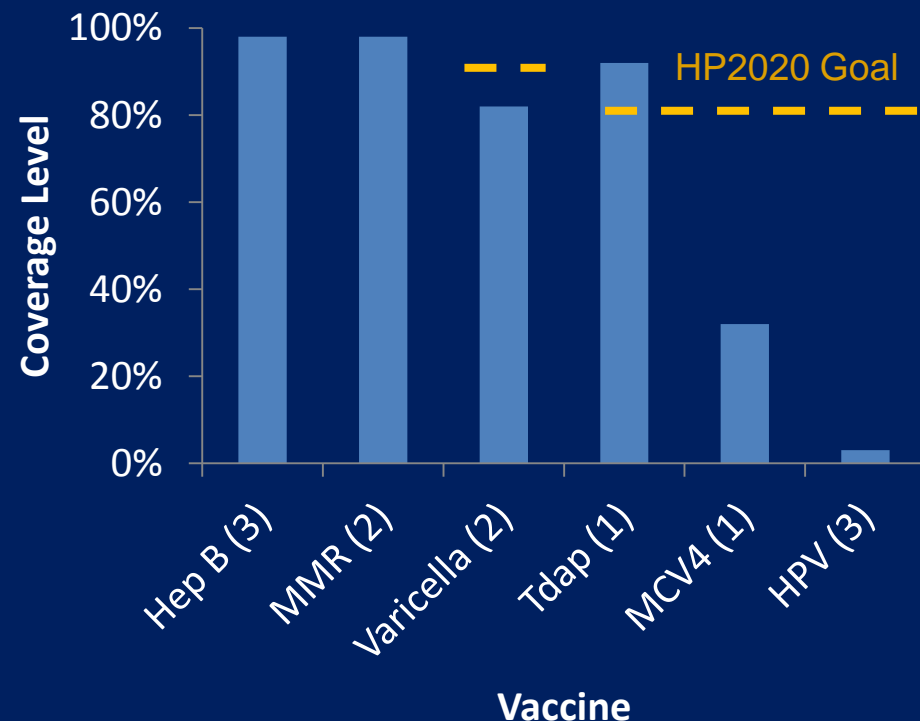


# 7<sup>th</sup> and 8<sup>th</sup> Grade Up-to-Date

## 7<sup>th</sup> Grade



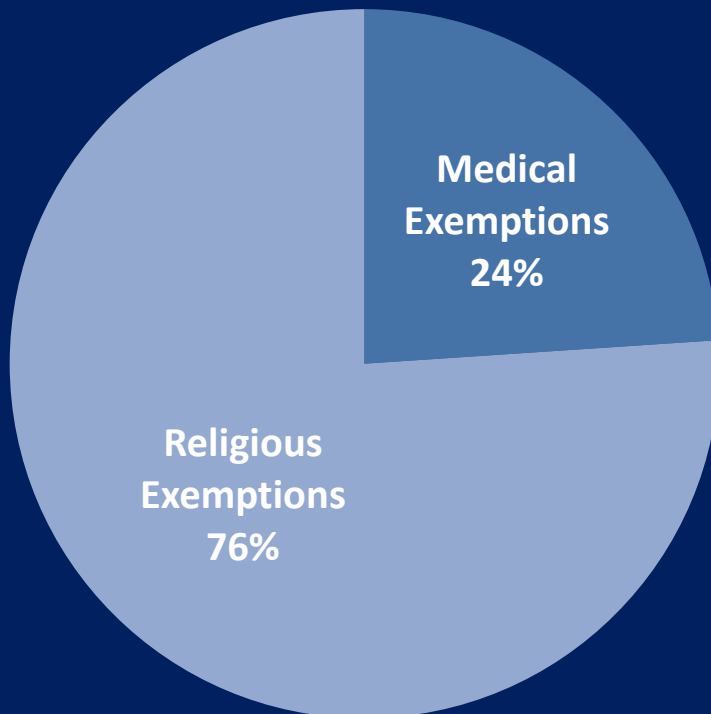
## 8<sup>th</sup> Grade



# 7<sup>th</sup> and 8<sup>th</sup> Grade Exemptions

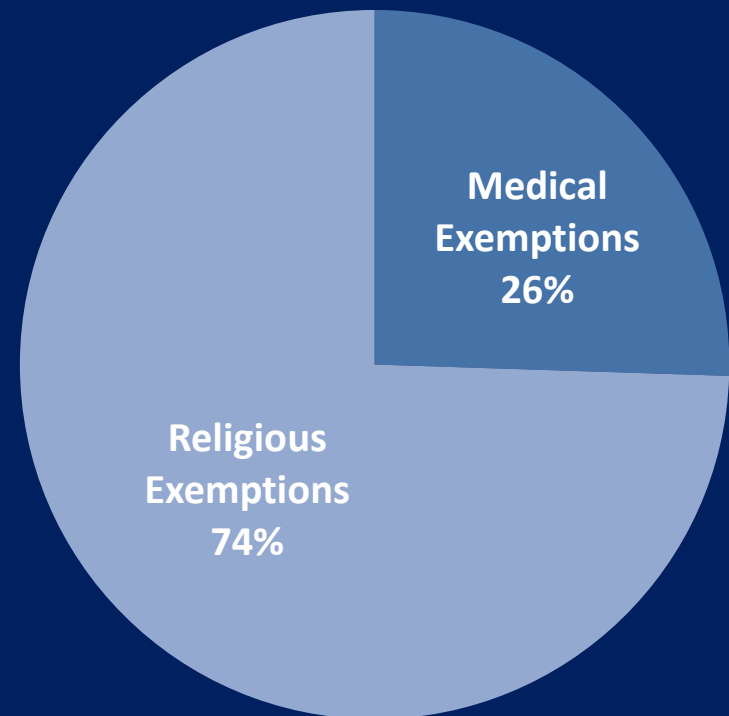
## 7<sup>th</sup> Grade

Total number of exemptions: 497 (1%)



## 8<sup>th</sup> Grade

Total number of exemptions: 439 (1%)



# Study Limitations

- **Validity of responses are unknown**
  - Validation not complete at this time
- **Immunizations not required for school may not be recorded on immunization document**
- **WebIZ data extraction may not be complete**
- **Variability in school responses**
  - Varicella (1 dose)
  - Exemptions

# Conclusions

- **6<sup>th</sup> Grade**
  - No HP2020 goals met
  - Exemptions account for 1% of enrollment
- **7<sup>th</sup> and 8<sup>th</sup> Grades**
  - Tdap meets HP2020 goal of 80%
  - Exemptions account for 1% of each enrollment
- **MCV4 and HPV have lowest coverage levels for all three grades**



# CHILDREN: KINDERGARTEN AND 24-MONTH-OLD ASSESSMENTS

# Background

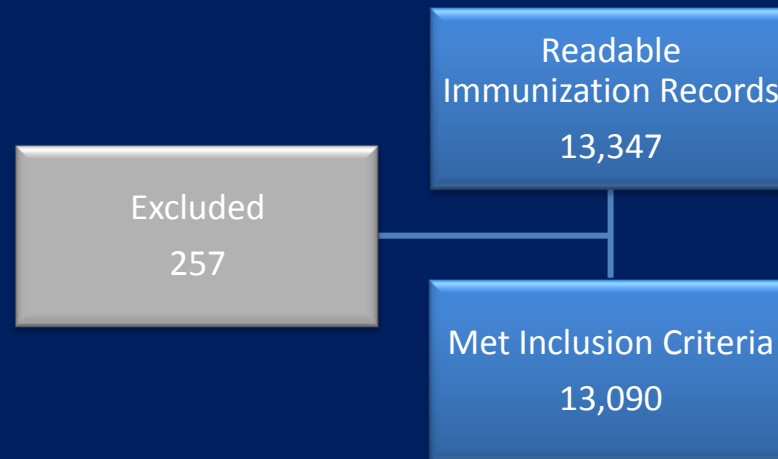
- **Long-standing study performed by KDHE**
- **Objective: evaluate immunization coverage levels for Kansas children**
- **Immunization Goals – Healthy People 2020 (HP2020) for kindergarten, HP2010 for 19-35 month olds**
  - **≥95% coverage for kindergarten immunizations (DTaP5, Polio4, MMR2, HepB3, Var2)**
  - **≥90% coverage for 19-35 month old immunizations (DTaP4, Polio3, MMR1, Hib3, HepB3, Var1)**
  - **≥80% coverage for complete 4-3-1-3-3 series at 19-35 month old**

# Methods

- **Letter sent to all schools with a kindergarten class**
  - Specifies how to select immunization records
  - KCIs or other immunization documents
  - KS-WebIZ
- **Data entry of all immunization records received by KDHE (~15,000 annually)**
- **Analysis**
  - Retrospectively – 24 months of age
  - Kindergarten entry

# Study Inclusion

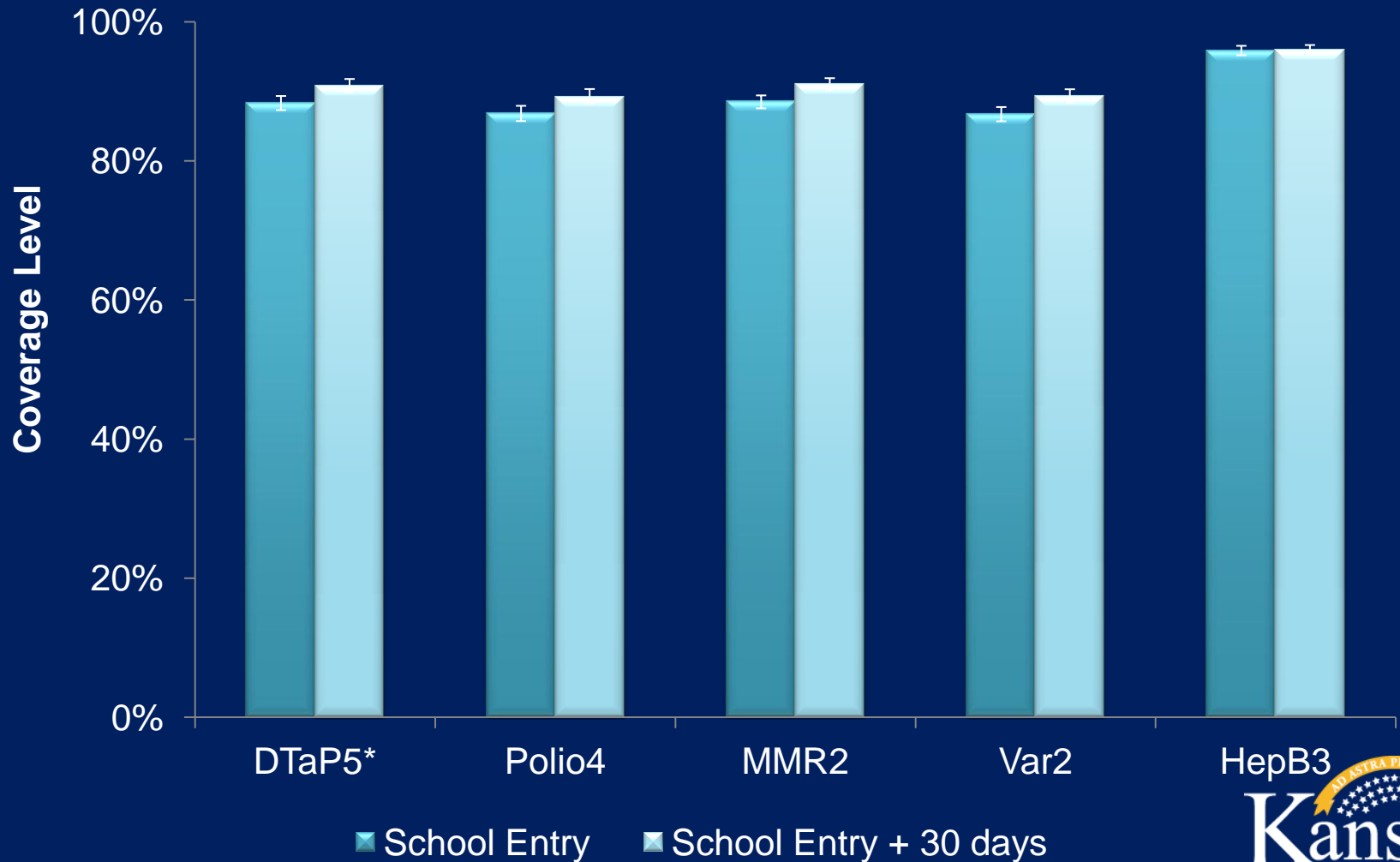
- **Inclusion Criteria:**
  - **Between the ages of 5 and 7 at school entry**



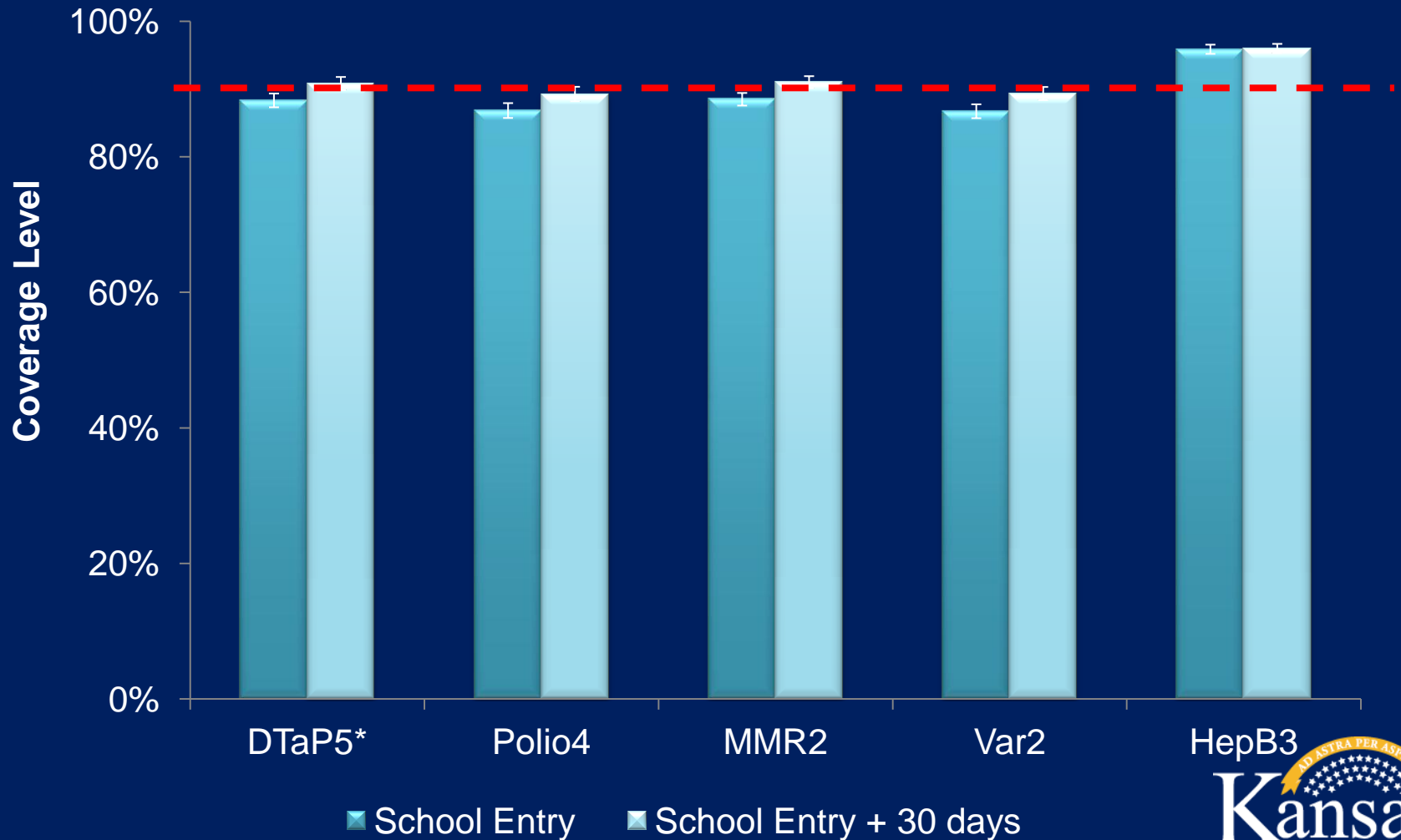
# KINDERGARTEN STUDY

## Results

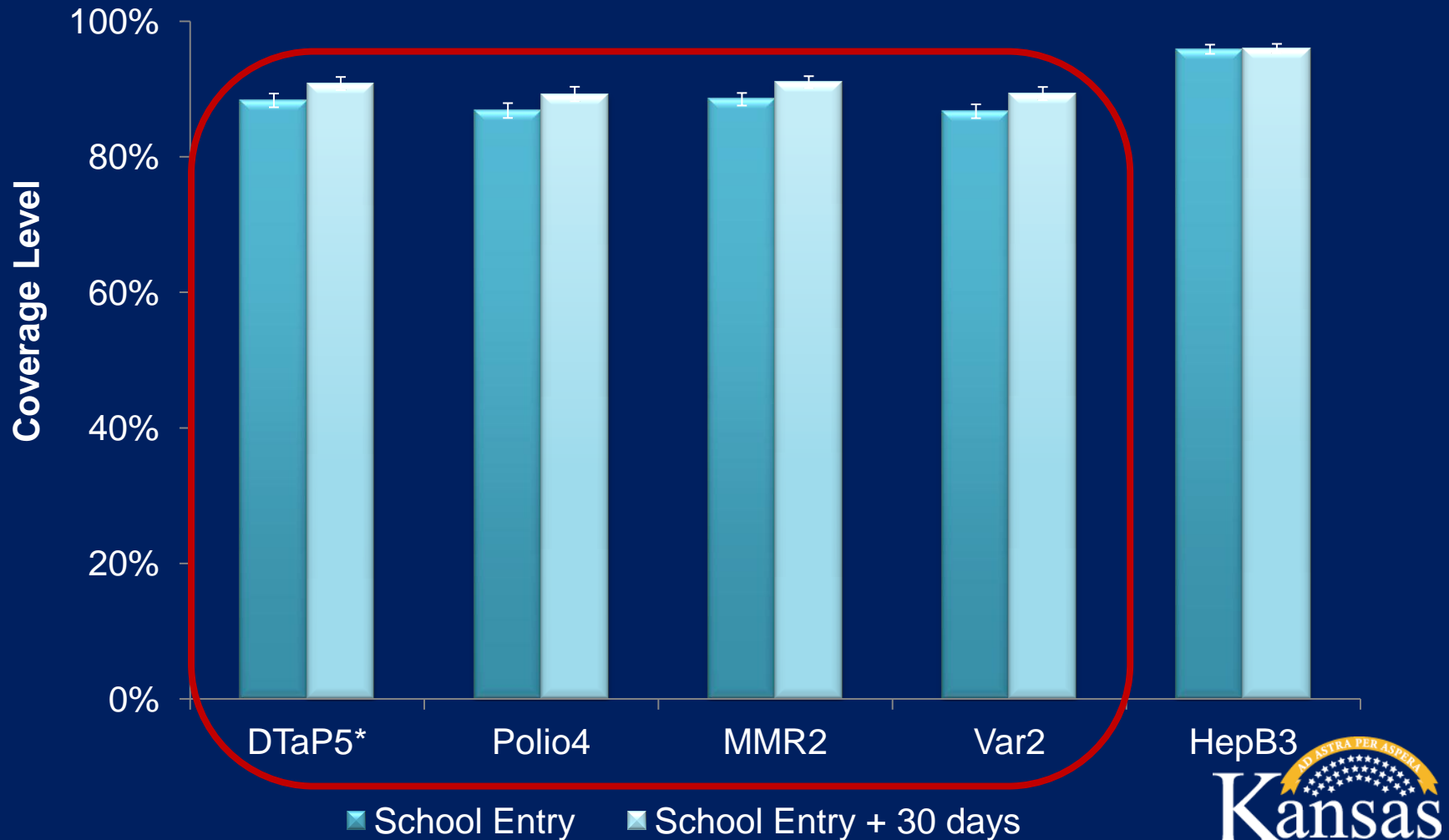
# Kindergarten Immunization Coverage



# Kindergarten Immunization Coverage



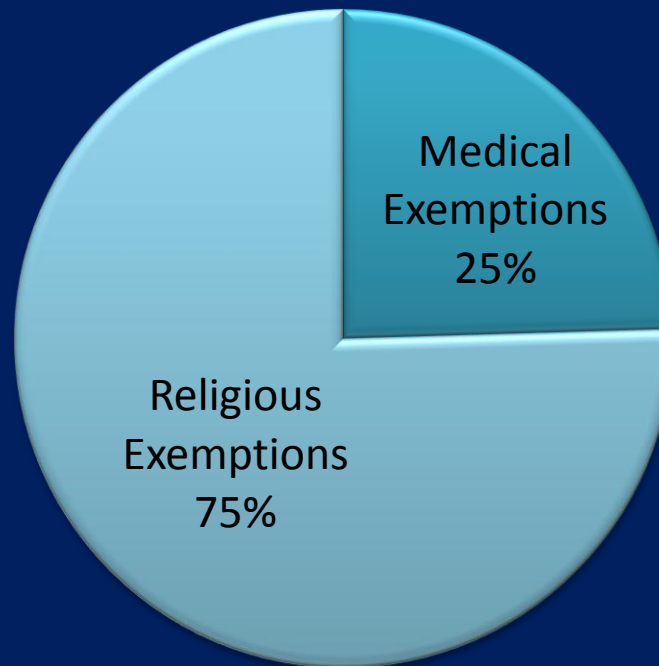
# Kindergarten Immunization Coverage





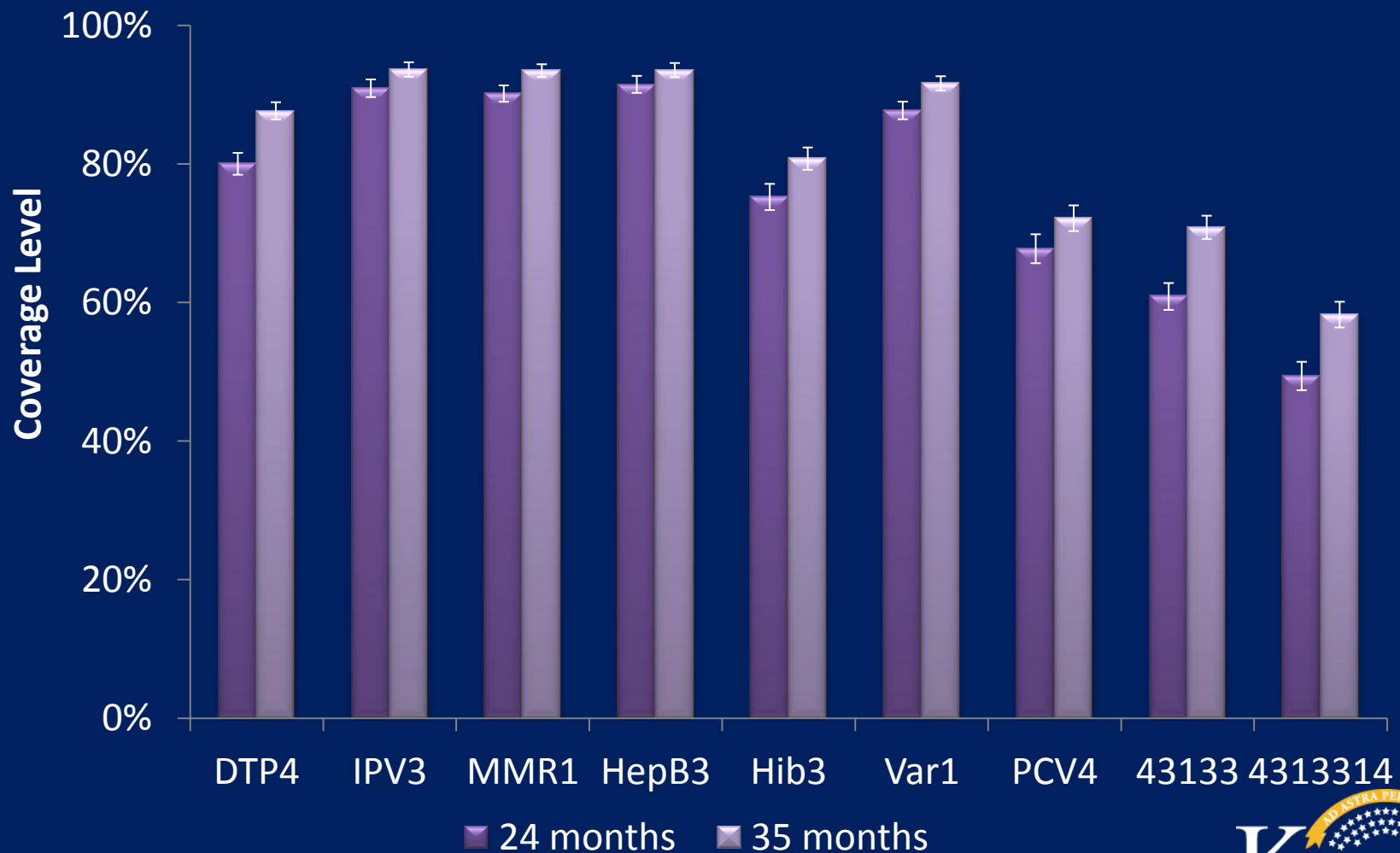
# Reported Exemptions

Total number of exemptions: 481 (1.4%)

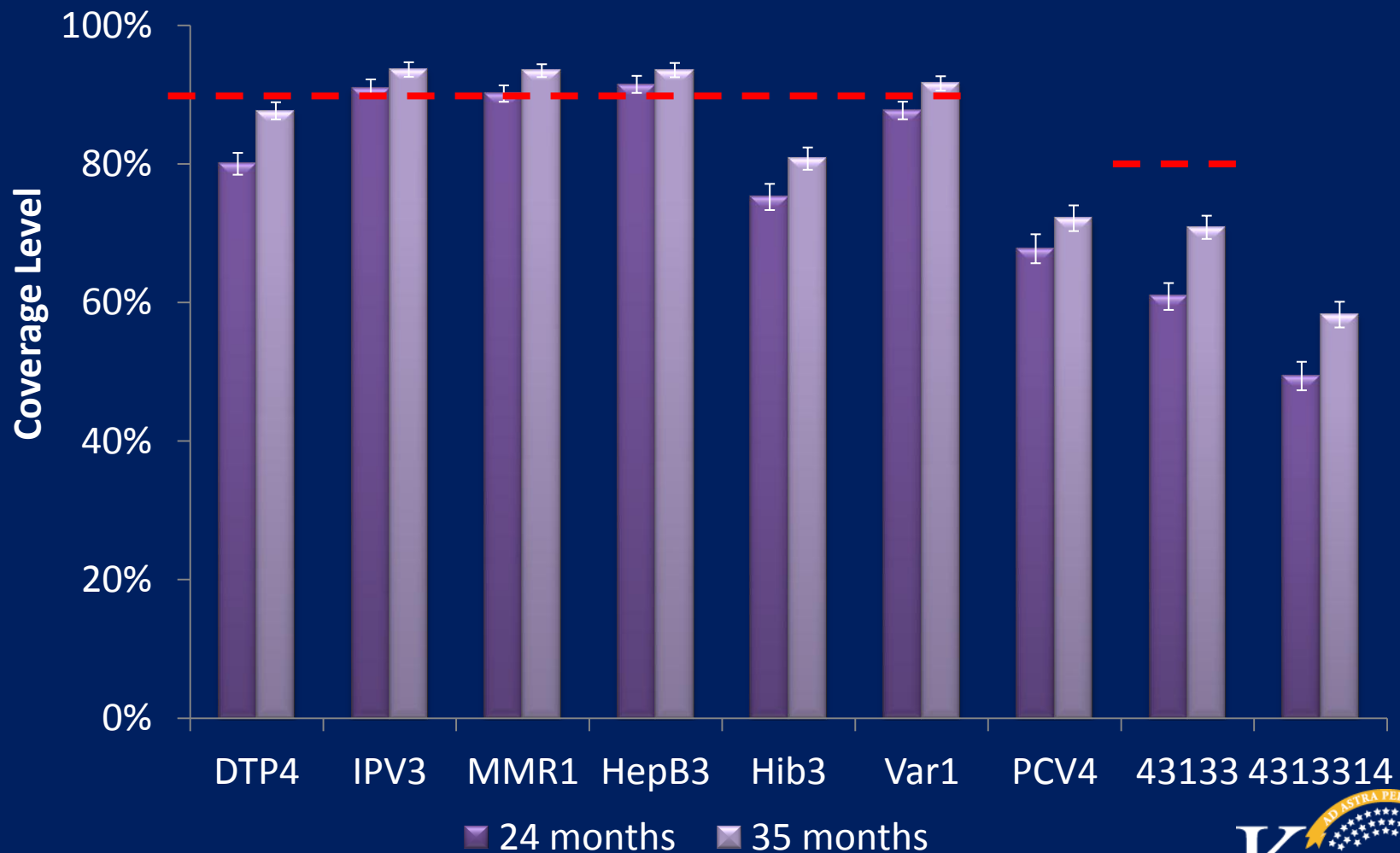


# RETROSPECTIVE STUDY Results

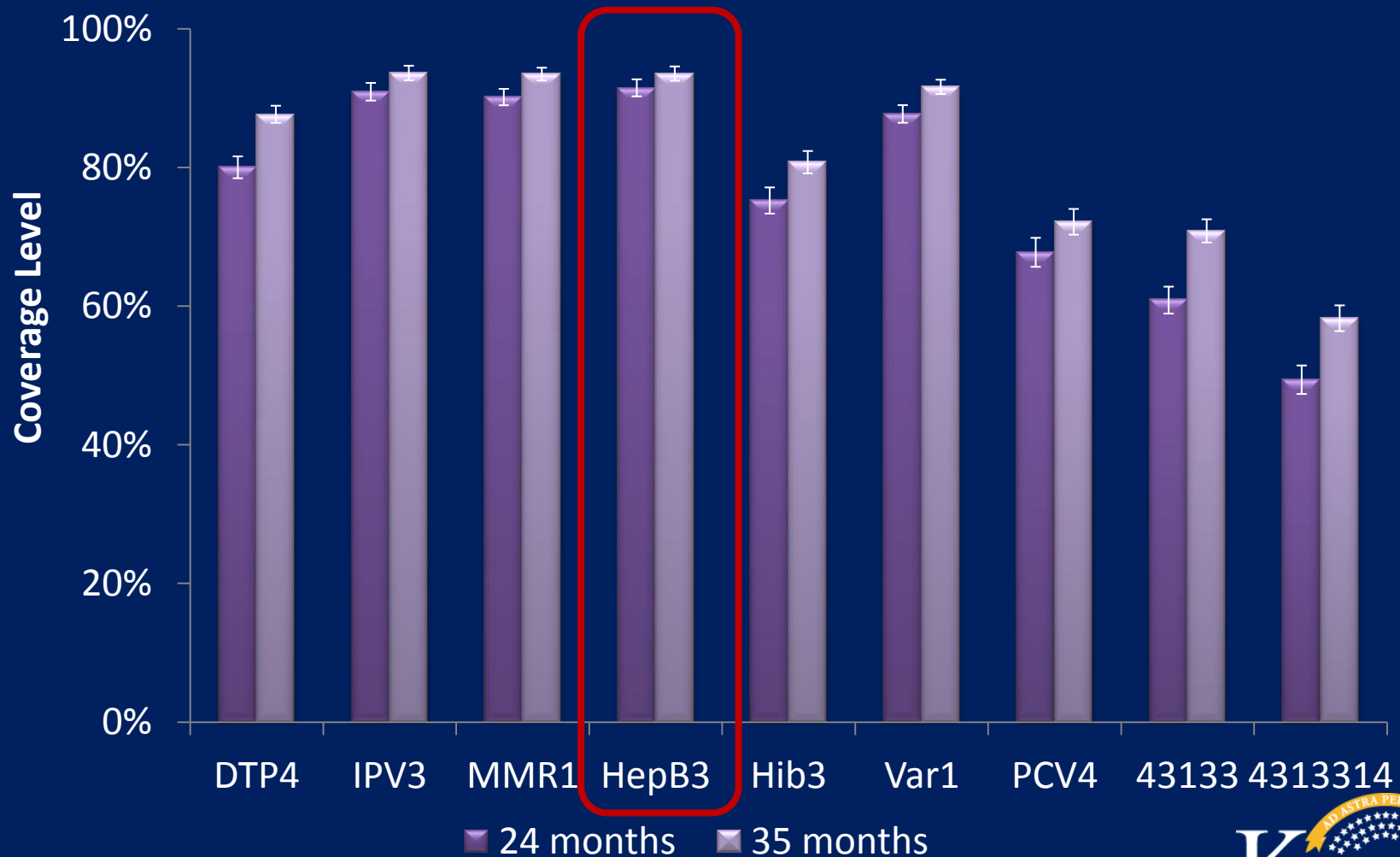
# Retrospective Immunization Coverage



# Retrospective Immunization Coverage



# Retrospective Immunization Coverage



# Study Limitations

- **Immunizations not required for school may not be recorded on immunization document**
- **Lack of descriptive data**
- **KS-WebIZ data not always entered correctly**

# Kindergarten Study

- **Immunization levels increase 30 days following school entry**
- **Most immunizations are below HP2020 goals at school entry**
- **Exemptions are approximately 1.4% of kindergarten population**

# Retrospective Study

- **Three vaccinations (MMR1, HepB3, Polio3) meet HP2010 goals by children at 24 months**
- **By 35 months, varicella also meets HP2010 goal**
- **DTaP4 remains low**
- **PCV4 has lowest immunization coverage level**



# Questions?



# Perinatal Hepatitis B Prevention Program (PHBPP)



# Chronic HBV

- **Major cause of:**
  - Cirrhosis of the liver
  - Primary hepatocellular carcinoma
- **Development of chronic HBV is age dependent**
- **Primary develops into chronic infection**
  - 5% of healthy older children and adults
  - 30% of children <5 years old
  - 90% of infants



# Chronic HBV

- ~ 25% of infected infants will develop
  - Chronic liver disease
  - Cirrhosis
  - Hepatocellular carcinoma
- ~ 25% of infected infants die as young adults



# Perinatal HBV

- Infection of infant after birth
- Risk of perinatal HBV infection among infants born to HBV+ mothers ranges from 10%-85%



# Kansas Law Requires



- **Physicians to test for HBV during each pregnancy (K.S.A. 65-153f)**
- **Laboratories to report positive results to the KDHE (K.S.R. 28-1-2)**
- **Births be registered with the KDHE Office of Vital Statistics within 5 days of birth (K.S.A. 65-2409a)**
  - **>95% registered electronically**

# PHBPP Coordinator

- Identifies all HBV positive lab reports from women ages 12-55
  - Pregnancy status is not on the lab reports
- Notifies county health departments through EpiTrax
  - Pregnant women go into the perinatal hepatitis B prevention program

# Local Health Departments

- **Establish pregnancy status**
- **Identify all relevant contacts**
  - Test and HBV vaccine if not protected or infected
- **Notify expected delivery hospital**
- **Follow infant through post-vaccination serologic testing**
- **Communicate findings to KDHE**



[www.kdheks.gov/immunize/phbpp](http://www.kdheks.gov/immunize/phbpp)



# PERINATAL HEPATITIS B PREVENTION PROGRAM MANUAL



**Perinatal Hepatitis B Prevention Program**  
**Infectious Disease Epidemiology and Response**  
**Bureau of Epidemiology and Public Health Informatics**  
**Kansas Department of Health and Environment**  
1000 SW Jackson, Suite 210  
Topeka, Kansas 66612-1290  
Telephone (785) 296-1059 Fax (785) 291-3775  
Reporting Hotline: Telephone (877) 427-7317 Fax (877) 427-7318



# Resources for:

- Hospitals
- OB/GYNs
- Pediatricians
- Public Health



# Report Forms

## *Disease Reporting for Health Professionals*

[http://www.kdheks.gov/epi/disease\\_reporting.html](http://www.kdheks.gov/epi/disease_reporting.html)

- Disease Reporting Requirements
- Kansas Notifiable Diseases List and Reporting Forms
  - Kansas Notifiable Diseases List and Reporting Form (.pdf)
  - Varicella Report Form (.pdf)
  - Perinatal Hepatitis B Prevention Program Report Forms
    - Hospital Report Form (.pdf)
    - Prenatal Care Provider Report Form (.pdf)
    - Pediatric Care Provider Report Form (.pdf)



### **PRENATAL CARE PROVIDER REPORT FORM PERINATAL HEPATITIS B PREVENTION**



### **HOSPITAL REPORT FORM PERINATAL HEPATITIS B PREVENTION**

Follow-up of infants born to HBsAg positive mothers

### **PEDIATRIC CARE REPORT FORM PERINATAL HEPATITIS B PREVENTION**



# Post-Vaccination Serologic Testing (PVST)

- Performed at 9-18 months of age ( $\geq 3$  months after last dose)
  - Hepatitis B surface antigen
  - Anti-HBs
- Working to have PVST provided through the state laboratory for infants in PHBPP – STAY TUNED

**PEDIATRIC CARE REPORT FORM  
PERINATAL HEPATITIS B PREVENTION**

HEPATITIS VACCINATION HISTORY (Please provide date given):

HBIG: Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time: \_\_\_\_:\_\_\_\_

HEP B DOSE 1: Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time: \_\_\_\_:\_\_\_\_

HEP B DOSE 2: \_\_\_\_/\_\_\_\_/\_\_\_\_ HEP B DOSE 3: \_\_\_\_/\_\_\_\_/\_\_\_\_

PVS Testing: Date \_\_\_\_/\_\_\_\_/\_\_\_\_

HBsAg:	<input type="checkbox"/> Positive	<input type="checkbox"/> Negative
Anti-HBs:	<input type="checkbox"/> Positive	<input type="checkbox"/> Negative

For questions or more information please call (785) 368-8208.

# Questions?





**[www.kdheks.gov](http://www.kdheks.gov)**

Bureau of Epidemiology and Public Health  
Informatics

[Epithotline@kdheks.gov](mailto:Epithotline@kdheks.gov)

Epidemiology Hotline 877-427-7317

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Healthy Kansans living in safe and sustainable environments.